Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

August 12, 1957

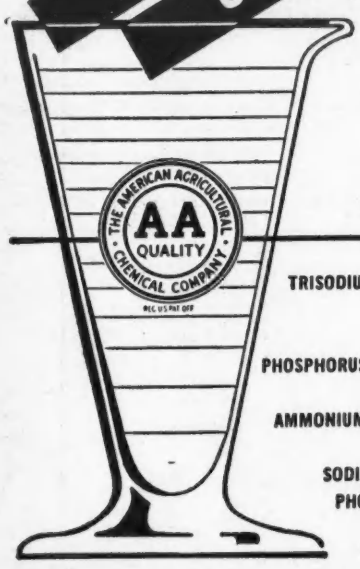
RECEIVED
AUG 12 1957
THE CHEMISTS' CLUB LIBRARY

For PURITY UNIFORMITY

"AA QUALITY"

CONTROLLED CHEMICALS

Tested from raw material to finished product, you can count on AA Quality Controlled Chemicals always—to give you highest possible quality and uniformity. Write today for further information and Free samples. Backed by over 85 years of experience.



TRISODIUM, DISODIUM PHOSPHATE, Anhydrous & Crystalline
PHOSPHORIC ACID 75% Food Grade
PHOSPHORIC ACID 85% N. F. Grade
PHOSPHORUS PENTASULPHIDE · PHOSPHORUS SESQUISULPHIDE
PHOSPHORUS RED AMORPHOUS
AMMONIUM, MAGNESIUM, SODIUM and ZINC SILICOFLUORIDE
POTASSIUM SILICOFLUORIDE
SODIUM FLUORIDE and AMMONIUM FLUOBORATE
PHOS-FEED® BRAND DICALCIUM PHOSPHATE

Phone or Write Chemical Sales Division

The AMERICAN AGRICULTURAL CHEMICAL Co.

50 Church Street, New York 7, N. Y. • BArclay 7-1400
P.O. Drawer 2458, Detroit 31, Mich. • Vinewood 2-0146

'SHARPLES' brand

ORGANIC SULFUR COMPOUNDS

METHYL MERCAPTAN
ETHYL MERCAPTAN
C_3-C_4 MERCAPTANS
AMYL MERCAPTAN
tert-DODECYL MERCAPTAN
DIMETHYL SULFIDE
DIETHYL SULFIDE
THIOPHENE

For additional information, write to Dept. O:

Pennsalt Chemicals

INDUSTRIAL DIVISION
PENNSALT CHEMICALS CORPORATION
3 Penn Center · Philadelphia 2, Pa.

Baker
AMMONIUM CHLORIDE,

U.S.P., Granular and Powder

Baker CHEMICALS

J. T. BAKER CHEMICAL CO.
PHILLIPSBURG, N. J.
New York · Chicago · Philadelphia · Los Angeles

Salt Cake

PRIOR CHEMICAL CORPORATION
420 LEXINGTON AVENUE
NEW YORK
CABLE: PRIORCHEM NEW YORK
PHONE: LExington 2-9811

INDUSTRIAL and PHARMACEUTICAL CHEMICALS

R. W. GREEFF & CO., INC.
10 Rockefeller Plaza, New York 20, N. Y.
1721 Tribune Tower, Chicago, Ill.

BORESTER®
Boric Acid Esters

Write for Composite Data Sheet

Boric Acid Esters in a wide variety: Straight Chain Branched Chain - Ring and Cage Structure including Stable, Solid and Liquid Forms

U. S. Borax & Chemical Corporation
PACIFIC COAST BORAX COMPANY DIVISION

60 Rockefeller Plaza, New York 20, N. Y. 630 Shatto Place, Los Angeles 5, California

RECEIVED
THE CHEMISTS CLUB
LIBRARY

solvents make a BIG DIFFERENCE

for
better
lacquers...

USE

CARBIDE'S SOLVENTS

Whether you use esters, ketones, alcohols, or glycol-ethers—the CARBIDE technical representative will give you unbiased help in selecting the best solvents for your use.

Two solvents, ethyl acetate and isopropyl acetate, are low-boiling or fast-evaporating esters that have served the lacquer industry faithfully for many years. Ethyl acetate combines high solvency with low lacquer viscosity. In addition, it has a pleasant odor. For a slower evaporating solvent, with relatively high blush resistance, choose isopropyl acetate.

for Further Information

on ethyl acetate or isopropyl acetate, ask your nearest Union Carbide Chemicals Company office for the book "Esters" (F-4766). If you want information on all of CARBIDE's solvents and plasticizers useful in lacquers ask for "Solvents" (F-7465). In Canada: Carbide Chemicals Company, Division of Union Carbide Canada Limited, Montreal.

UNION CARBIDE
CHEMICALS

Union Carbide Chemicals Company
Division of Union Carbide Corporation
30 East 42nd Street, New York 17, N. Y.

Oil, Paint and Drug Reporter

Vol. 172 No. 7 30 Church St., New York 7, N. Y. August 12, 1957

RECEIVED AUG 12 1957 THE CHEMISTS' CLUB LIBRARY

Zinc Demand Seen Good

Consumption of slab zinc during 1957 promises to be well in excess of 900,000 tons, according to preliminary figures just released by the American Zinc Institute.

John L. Kimberley, executive vice-president of the AZI, reports that despite the current unbalance between production and consumption of slab zinc, the drop in zinc prices, and the "wait-and-see" attitude on the part of zinc purchasers, 1957 will end up among the top consumption years in the industry's history.

He bases his opinion on the consumption figures already available for the first five months of the year and conservative industry estimates for the balance of the year. Bureau of Mines' preliminary figures through May of 1957 show consumption at 401,185 tons.

If consumption remains low through August and increases slightly during the last four months of the year, as it has done in the past, the total consumption figure will still be on the order of 950,000 tons, the AZI official says.

According to Mr. Kimberley, trend lines based on the major uses of zinc are particularly promising and even though the years 1956 and 1957 are "off" from the boom year of 1955, the long-range picture of slab zinc consumption is well upward.

He cites especially the growing demand for zinc to galvanize steel, zinc's permanently strong position in die casting, and its steady use in rolled forms brass and zinc pigments.

Additives a Necessity in Food, But Cancer-Testing All of Them Is Impossible, Scientists Declare

Chemicals have become an absolute necessity in the production, processing and storage of foods, and to require that every such substance be subjected to pretesting to determine its possible cancer-producing properties would prove to be an impossible and hopeless task. This, in substance, is the general opinion expressed by a group of the nation's leading scientists called to advise the house subcommittee on health and science on legislation for the control of food additives.

Last week they told the committee that so little is actually known about the causes of cancer that it is impossible for the professions to set forth any doctrine on the subject. Substances that produce cancer in laboratory animals do not necessarily produce cancer in man, and vice versa. The complexities of the problem are so great that it will be years before the answers to many of the questions are found. However, they agreed, there is no evidence that any cancer-causing additive is today being used in foods.

Invited by Subcommittee

The group of fifteen scientists appeared at the invitation of the subcommittee for a two-day panel discussion of the scientific problems involved in testing and evaluating the safety of chemical additives. Dr. William J. Darby, head of the department of biochemistry, and director of the division of nutrition of Vanderbilt University School of Medicine, as well as chairman of the food protection committee of the National Academy of Sciences, served as chairman of the panel.

At the conclusion of the discussions, the meetings of the subcommittee were recessed without a date being set for resumption of hearings on the legislation. Yet to be heard are spokesmen for the Food and Drug Administration and its parent agency, the Department of Health, Education and Welfare, but subcommittee chairman John Bell Williams of Mississippi has given no indication when this will occur. There was speculation in some quarters that further hearings may be put over until next session.

The panel discussions on the scientific aspects of the additives problem were

—Continued on page 82

OLIN VICE-PRESIDENT: W. B. Copeland, formerly executive vice-president of Smith-Douglass Company, who has been appointed division vice-president of its plant food division by Olin Mathieson Chemical Corporation, New York.

Chemical Industry to Be Saddled With Another Boost in Rail Freight

The chemical industry faces another early hike in freight rates as a result of action taken last week by Interstate Commerce Commission. Acting on a petition of the carriers, the commission approved an increase of 7 percent in existing rates within and between the eastern and western territories, and an increase of 4 percent within, from, and to the southern territory. The increases are in addition to those granted by the commission last December and now made permanent.

The rates thus will be 14 percent higher for the eastern territory, 12 percent higher for the western territory and 9 percent higher for the southern territory, over the rates in effect last December.

Exceptions In ICC Order

A number of exceptions to the percentage increases was contained in the order of the commission. Among the exceptions are "hold-downs" on increases in the rate on phosphate rock of an additional 10 cents per ton over the 30 cents increase provided last December, and 25 cents per ton for potash over the 50 cents per ton increase allowed in December.

The increases granted by the committee can be put into effect by the railroads on fifteen days notice. There was no announcement from the railroads when this would take place.

It is estimated that the rise in the rates will produce an additional $897 million in revenues for the carriers and is intended

—Continued on page 52

MARKETING DIRECTOR: Harold G. Shelton, elevated from sales manager of Antara Chemicals to director of marketing for its dyestuff and chemical division by General Aniline & Film Corporation, New York.

Consolidated to Add To Texas Sulfur Unit

Consolidated Chemical Industries, a division of Stauffer Chemical Company, has completed plans to more than double the capacity of its sulfur recovery plant at Baytown, Tex. Construction is scheduled to begin at once, and it is anticipated that the new units will be on stream early next year

The Stauffer Baytown plant utilizes sulfur-containing gases from the adjacent refinery of Humble Oil & Refining Company as its basic feed stock. Installation of new equipment by Humble is making a larger volume of refinery gases available for processing.

In some areas of the country such refinery gases are either vented or flared. However, since 1953 when Baytown sulfur recovery plant was built, the gases from the Humble refinery have been rid of sulfur by the Stauffer processing plant

This has, of course, resulted not only in the conservation of a valuable raw material, but also has minimized air pollution problems in the Baytown area.

Pfizer in Petrochemicals; Purchases Morton-Withers

In a move which takes it into the petrochemical field, Chas. Pfizer & Co., Brooklyn, N. Y., has acquired Morton-Withers Chemical Company of Greensboro, N.C., and will operate it as a subsidiary.

Morton-Withers produces chemical specialties for the petroleum, rubber and plastics industry. No changes are planned in its management or personnel. Joseph P. Morton will continue as president of the firm and John P. Withers as its vice-president.

Founded in 1931 as the Textile Chemical Products Company, Morton-Withers manufactures, among other products, vinyl stabilizers, components for synthetic lubricants for jet engines, synthetic petroleum sulfonates useful as detergents and as lubricating oil additives and polyester resins.

At a dinner in Greensboro last week, John E. McKeen, Pfizer president, revealed that the Brooklyn firm has under study "several new products which can be adapted to Morton-Withers' manufacturing facilities."

Cyanamid, Ill. Powder Join in Purchase Pact

American Cyanamid Company, New York, has signed an agreement with Illinois Powder Manufacturing Company, St. Louis, Mo., a producer of industrial explosives, providing for the sale of Illinois Powder's business and assets to Cyanamid.

The transaction is subject to the approval of Illinois Powder stockholders who will vote on the matter at a special meeting to be held August 29.

Illinois Powder would become a part of the explosives department of Cyanamid's organic chemicals division.

"With this acquisition, Cyanamid's industrial explosives sales will now be on substantially a national basis," Kenneth Towe, president, said, "permitting the

—Continued on page 50

Navy May Yet Discontinue Paint Operations This Year

The navy may yet be forced out of the paint production business this year. The senate armed services committee last week eliminated the provision in the military construction bill (HR 8240) that gives congress veto power over plans of the Department of Defense to discontinue commercial-type operations of the military that compete with private business. The bill was sent to the senate floor and may come up for passage this week.

The on-again-off-again developments surrounding the navy's paint manufacturing operations are currently in the off-again stage by virtue of the action of the house armed services committee several weeks ago is unexpectedly writing a section into the bill putting a congressional check on all military efforts to get out of ac-

—Continued on page 41

Fatty Acids Production Rose Higher for June

Production of saturated and unsaturated fatty acids in June was 35.1 million pounds, about 0.4 million pounds above the May level, but very close to the production figure reported for June, 1956, says the Association of American Soap and Glycerine Producers.

Disposition in June totalled 31.6 million pounds, down 3.2 million pounds from the May figure, and down 1.7 million pounds from the disposition figure for June, 1956. Stocks of finished goods at the end of June totalled 33.4 million pounds, about 4.4 million pounds higher than the previous month's figure. "Work-in-process" decreased about 4.2 million pounds.

TGA on New Cosmetics Bill: Okay, But Who Needs It

The toiletries industry has given its tacit approval, if not its full blessing, to a bill providing for the pretesting of chemical ingredients used in cosmetics.

The measure (HR 9153), dropped in the legislative mill last week, is being sponsored by Rep. John Bell Williams of Mississippi. Mr. Williams is chairman of the house health and science subcommittee.

Toilet Goods Association thinks some of the provisions of the bill may be "helpful to the industry as a whole in improving the atmosphere of public relations surrounding it" and, therefore, "does not intend to oppose the enactment of this legislation."

Here's TGA's reasoning, as explained by its executive vice-president, Stephen L. Mayham:

"It is, and has been, the contention of the TGA that no additional cosmetic legislation, with the exception of a revision of the color certification provisions, is either necessary or desirable.

"However, the industry is almost certain to get some sort of legislation and at this time the association sees nothing in the proposal which would be harmful to manufacturers of cosmetics."

Under the Williams bill, the definition of a new cosmetic ingredient would exclude substances which are generally recognized among experts or in the scientific literature as safe, or where prolonged use reasonably warrants the conclusion that the substances are safe, or substances

—Continued on page 55

Tax Aid, Except for Defense, Ordered Halted by Senate Group

The senate finance committee has ordered a halt to the issuance of accelerated tax amortization certificates by the Office of Defense Mobilization beginning August 22, except for facilities directly connected with defense, and to the entire program by December 31, 1959. The action came in approval of legislation shortly to be brought before the senate for passage growing out of investigations made by Sen. Harry F. Byrd of Virginia, chairman of the committee, which led the committee to conclude that the rapid tax amortization program has served its intended purpose.

DEVELOPMENT MANAGER: John J. Glover, who on August 15 becomes manager of the new commercial development division formed by Jefferson Chemical Company, Houston, Tex., out of its former market research and sales research and development divisions.

Revision of Earlier Date

The August 22 date is a revision of an earlier decision by the committee. It had been planned at first to ring down the curtain on issuance of new certificates, except for the most essential types of facilities, as of August 5. At the request of ODM director Gordon Gray, the deadline was moved ahead to August 22 to give ODM time to complete action on pending certificates for liquid oxygen and nitrogen facilities.

Because of the need for large amounts of liquid oxygen and liquid nitrogen in the missiles program, ODM set up a goal for these chemicals and industry responded to the point of proposing the construction of $24 million of new productive facilities. The certificates are now before the ODM for study and action — now scheduled for sometime prior to August 22.

After that date, ODM will be restricted to approving certificates for rapid write-offs only on facilities connected with new production and research directly for the benefit of the Department of Defense or the Atomic Energy Commission.

Until August 22, Sen. Byrd said, he has the assurance of Mr. Gray that no other certificates will be approved, except for the liquid oxygen and nitrogen facilities.

It is expected that the house will concur in the finance committee action. The ways and means committee of the house is known to have grown cool to the accelerated tax amortization program, but since the senate finance committee was planning action it decided to await these developments.

Mica Duties Change Is Passed by House

The house has voted to modify the tariff duties on imported mica. HR 6894 recently passed and sent to the senate for concurrent approval provides for a flat rate of duty of 4 cents per pound on all unmanufactured mica and transfers to the free list mica films and splittings not cut or stamped to dimensions.

The effect of the bill would be to reduce the duty on unmanufactured mica valued over 15 cents per pound to the same rate as that on unmanufactured valued at less than 15 cents a pound. The changes are expected to result in a slight increase in imports in the unmanufactured and uncut mica films, but a corresponding reduction in imports of cut mica films and fabricated mica parts.

It was explained that this can be expected to take place because the domestic mica fabricators should be able to purchase unmanufactured mica at somewhat lower prices, inasmuch as most of the countries shipping fabricated mica to the United States must import unmanufactured mica from the same sources as the United States.

Tanning Extract Tariffs Suspended in House Vote

The house last week voted to suspend for three years all import duties on tanning extracts entering the United States. The action came when the house gave unanimous approval to HR 2842 and sent it to the senate. There was no indication when the senate might consider the measure.

The tariff act of 1930 groups both dyeing and tanning extracts in paragraph 38 and imposes a duty of 15 percent ad valorem. Through various trade agreements negotiated over the years, this 15 percent rate has been reduced for various of the items mentioned in the paragraph to a range of 3¾ to 7½ percent ad valorem.

HR 2842 modifies paragraph 38 to limit its scope to dyeing extracts and adds a new sub-paragraph (b) to paragraph 1670

—Continued on page 59

The Week's Price Changes

Aluminum Hydrate, Calcined Alumina, Silver Nitrate Advance. Copper and Copper Salts, Mercury, Petroleum Toluene Decline.

Prices Advanced

Alumina, calcined, 2/10c. per lb. (p. 38).
Aluminum hydrate, 3/20c. per lb. (p. 38).
Aluminum paste, extra fine, 1½c. per lb. (p. 60).
Powder, extra fine, 2½c. per lb.
Powder, standard, 3c. per lb.
Cocoa butter, 1c. per lb. (p. 64).
Coconut oil, crude, ½c. per lb. (p. 64).
Copra, $7.50 per ton (p. 64).
Cottonseed meal, $2 per ton (p. 64).
Linseed meal, $1.50 per ton (p. 64).
Linseed oil, 3/10c. per lb. (p. 64).
Linseed oil fatty acid, 3/10c. per lb. (p. 64).
Nutmeg oil, $1.50 per lb. (p. 58).
Oleic acid, ¾c. per lb. (p. 64).
Oleo stearine, ¼c. to ½c. per lb. (p. 64).
Ouricury wax, crude, 1c. per lb. (p. 64).
Peanut meal, 50c. per ton (p. 64).
Peanut oil, crude, ½c. per lb. (p. 64).
Shellac, superfine, 1c. per lb. (p. 60).
Silver, ¼c. per lb. (p. 38).
Silver nitrate, ⅝c. per oz. (p. 49).
Soybean meal, $2 per ton (p. 64).
Stearic acid, ¾c. per lb. (p. 64).
Tallow fatty acid, ¾c. per lb. (p. 64).

Prices Reduced

Anise oil, 25c. per lb. (p. 58).
Cajeput oil, redist., 10c. per lb. (p. 58).
Clove bud oil, 10c. per lb. (p. 58).
Copper carbonate, 4/10c. per lb. (p. 38).
Copper chloride, cupric, anhyd., ¼c. per lb. (p. 38).
Cryst., dihydrate, ¼c. per lb.
Cryst., dried, ¼c. per lb.
Copper metal, ¾c. per lb. (p. 38).
Copper sulfate, CP, 25c. per cwt. (p. 38).
Cryst., 99%, 25c. per cwt.
Monohydrated, 29c. per cwt.
Tribasic, 40c. per cwt.
Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Cottonseed oil, crude, ¼c. to ⅜c. per lb. (p. 64).
Refd., ⅜c. per lb.
Glycerine, crude, dom., nat., saponification, 1/10c. per lb. (p. 44).
Nat., soaplye, ¼c. per lb.
Lard, cash, 3/10c. per lb. (p. 64).
Lemon oil, Messina, 50c. per lb. (p. 58).
Mercury, $3 per flask (p. 38).
Myrobalans, Bombay, $8 per ton (p. 66).
Genuine JI's $8 per ton crushed, $7 per ton
Safrol, 2c. per lb. (p. 58).
Soybean oil, crude, ½c. per lb. (p. 64).
Refd., ½c. per lb.
Tin metal, ¾c. per lb. (p. 38).
Toluene, petroleum, 2c. to 3¼c. per gal. (p. 57).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Aug. 9, 1957	Aug. 2, 1957	Aug. 10, 1956
110.32	110.16	108.99

Tar Flowed Slower Last Year

Tar output flowed a little slower in the United States last year. The Tariff Commission says the total domestic output of all tars (coaltar, water-gas tar and oil-gas tar) amounted to 891 million gallons in 1956—about 3 percent less than the 914 million gallons reported for 1955. In its eleventh in a series of reports on synthetic organic chemicals, the Tariff Commission shows that production of industrial and specification grade benzenes (including that produced from petroleum and imported crude materials) amounted to 337 million gallons in 1956, compared with 307 million gallons in 1955. Sales of such benzenes in 1956 were 284 million gallons, valued at $103 million, compared with 265 million gallons, valued at $98 million, in 1955.

Production of toluene (including material produced from petroleum for use in aviation fuel) amounted to 174 million gallons in 1956—slightly less than the 186 million gallons reported in 1955. Sales of toluene in 1956 were 135 million gallons, valued at $35 million, compared with 138 million gallons, valued at $39 million, in 1955.

The output of xylene in 1956 (including

—Continued on page 45

Amyl Amine Reduced

Freeman Industries, Inc., Tuckahoe, N. Y., has reduced prices on its isomerically pure normal amyl amine. It will sell at $16 per pound, purchased in 180-pound steel containers. In addition, Freeman is reducing prices on its 2-methyl butyl amine in quantities over thirty pounds. In large quantities it is selling for less than $25 a pound.

HEADS NEW CLIMAX UNIT: George L. Innes, named by Climax Molybdenum Company, New York, to head up its new consolidated group comprising its chemical sales and development activities.

Index to News and Market Reports

Association News

DCAT Probes Expense Accounts..... 7
Chemical Plant Risks on Safety Agenda 7

Government News

Additives a Necessity, Scientists Report.. 3
Antibiotic Rules Amended 39
Casein Duty Bill Clears House 5
Chemical Industry Saddled by Rail Boost 3
Dyes Picture Faded as Output Declines.. 7
Labeling Law Awaits Next Session 5
McElroy Is New Defense Secretary 5
Mica Duties Revision Passed 4
Navy May Discontinue Paint Output.... 3
SBA's Life Is Extended 39
Tanning Extract Duty Suspended 4
Tax Aid Halt Ordered 4
TGA Okays Cosmetic Bill 3
Zinc Demand Seen Good 3

Industry News

Alumina Production Halt Called 5
American Alcolac Plans Amine Output .. 5
American-Marietta to Enter Ink Field .. 5
Ammonium Nitrate a Blasting Agent 5
Amyl Amine Reduced 4
Celanese Earnings Down 55
Consolidated Doubling Texas Sulfur Unit 3
Cyanamid, Ill., Powder Join in Pact 3
Cyanamid Magazine Marks Anniversary 39
Cyclic Intermediate Production Up 7
Diamond to Close Nicotine Plant 7
Electromet Post Filled 51
Fatty Acids Production Higher 3
P&G Center to Be Built 56
Pfizer in Petrochemicals 3
Phthalic Anhydride Plant Operating 5
Piperazine Available from Carbide 56
Pitts. Coke Buys Insul-Mastic's Assets .. 5
Reisman Named Representative 71
Rubber Lab Bought by Firestone 7
Selenium Important in Chick Diet 7
Spencer Producing Nylon in Ky. 7
Sitosterol Commercially Available 56
Steffen Joins Columbian Carbon 7
Standard Chemical Celebrates 59
Tar Flowed Slower Last Year 4

International News

FDA Imports Law Passed in House 51
Reichhold Unit Offers Stock 5

Personnel News

Amoco Names Hockley 5
Climax Names Innes 4
Cyanamid Fills Sales Post 61
Jefferson Appoints Glover 4
Geisinger Retiring at Diamond 5
MCA Adds to Staff 7
Olin Appoints Copeland 3
Pfizer Appoints Van Gasse 7
Shelton Named GAF Director 3
Velsicol Names Chadwick 5

General Features

Acids 38
Agricultural Chemicals 43
Aliphatic Organics 44
Aromatic Chemicals 58
Botanical Drugs, Gums..... 48
Coal Chemicals 46
Coatings Materials 60
Drugs 49
Essential Oils 58
Fats and Greases..... 64
Fertilizer Materials 43
Fine Chemicals 49
Heavy Chemicals 38
Industrial Organic Chemicals..... 44
Lacquer Materials 60
Leather Chemicals 66
Naval Stores 60
Oil Cake and Meal..... 64
Oils 64
Paint Materials 60
Pesticides 43
Petrochemicals 44
Petroleum Derivatives 57
Protective Coatings Materials..... 60
Spices 58
Textile Chemicals 66

Market Reports

Advertisers Index 71
Association Meeting Dates..... 7
Bids Wanted 42
Classified Advertisements 70
Consulting Chemists and Engineers..... 71
Coal Chemical Output..... 46
Crude Oil Stocks 37
Current Market Quotations 9
Editorials 36
Imports 54
Jobs & People 41
Obituaries 42
OPD Price Index..... 4
Washington Talks It Over..... 36

Oil, Paint and Drug Reporter, Vol. 172, No. 7, August 12, 1957. Published every Monday by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U. S. A. Subscription prices—United States and possessions: $5 a year; Canada and Newfoundland, $7; other countries $10. Entered as second-class matter, January 15, 1884, at the New York Post Office under the act of March 3, 1879. Copyright, 1957, by Schnell Publishing Company, Inc.

RETIRING, INCOMING PLASTICS MANAGERS: A. L. Geisinger (right), vice-president and general manager of the plastics division of Diamond Alkali Company, Cleveland, Ohio, since 1953 and a thirty-eight-year veteran with the firm, who will retire at the end of the year. James P. Okie (left), assistant general manager of the division for the past five months, who has been named to succeed Mr. Geisinger as general manager of Diamond's plastics division. Until his retirement December 31, Mr. Geisinger will continue as a vice-president of the company and will devote his attention chiefly to the transfer of managerial responsibilities to Mr. Okie.

Casein Import Duty Suspension Bill Is Passed Unanimously by House

The Byrnes bill, HR 38, suspending import duties on casein until March 31, 1960, was passed unanimously by the house last week and sent to the senate for concurrent approval. No date has been set for senate action, but chances of the bill getting through before adjournment of the session were considered to be good. The duties being suspended by the bill amount to 2¾ cents per pound and have been in effect since November, 1941, pursuant to a trade agreement with Argentina. Under the tariff act of 1930, the duty was fixed at 5½ cents a pound.

DIRECTOR OF MANUFACTURING: A. B. Chadwick, appointed director of manufacturing by Velsicol Chemical Corporation, Chicago.

Domestic Output Dwindles

Information given to congress to support the bill was to the effect that while domestic production and imports of casein have fluctuated during the past thirty years, the general trend of domestic production has been downward and the trend of imports has been upward. Domestic production in 1956 was estimated at less than 1 million pounds or less than 1½ percent of total needs.

Domestic production has failed to follow the demand in recent years because the raw material (skim milk) is more profitably converted to other products.

Earlier, when HR 38 was up for consideration by the house ways and means committee, the Tariff Commission submitted a report giving a history of imports and tariffs.

The report pointed out how the dairy price support program of the government

—*Continued on page 61*

Pitts. Coke Buys Insul-Mastic's Assets

Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., has bought the assets of the Insul-Mastic companies of Summit, Ill., producers of industrial protective coatings, it was disclosed last week by W. Kenneth Menke, vice-president of Pittsburgh Coke.

The newly-acquired facilities, located near Chicago, will continue production of the Insul-Mastic line of asphaltic coatings and insulating materials for sale through Pittsburgh Coke's protective coatings division. The Insul-Mastic sales organization will be integrated with the division's sales force.

Insul-Mastic products are primarily

—*Continued on page 41*

Alumina Production Halt Is Called at East St. Louis

Aluminum Company of America has decided to halt production of alumina at its East St. Louis, Ill., works on November 1.

Works manager J. Walter Wells said, however, that the East St. Louis works will continue to produce aluminum chloride and cryolite, essential to aluminum production, and other chemical products.

Mr. Wells cited the great changes that have taken place in the structure of the aluminum industry over the years as the principal reason for the shutdown of the fifty-four-year-old alumina-producing operation. Alumina is produced by refining bauxite, and it is then used to make metallic aluminum.

Alcoa's basic bauxite supply was in Arkansas when the East St. Louis plant was built in 1903. Today, however, more than 75 percent of the industry's bauxite comes from South America and the Caribbean islands.

Labeling Household Chemicals Must Wait for Federal Controls Until Next Session of Congress

Congressional action on legislation for federal controls over the labeling of the thousands of household chemical compounds now on the market must wait until next session. Rep. John Bell Williams of Mississippi, chairman of the house health and science subcommittee having charge of such legislation, says he does not plan to hold any public hearings on the measures until next year. Mr. Williams has just introduced a bill (HR 9063) which would greatly broaden the authority of the Food and Drug Administration over the marketing of hazardous household chemicals.

This, he believes, will meet the problem presented by the absence of adequate labeling as to dangers involved in the misuse of the products, and by the absence of information on the first-aid treatment that should be used.

Although the bill is identical with the Curtis bill, HR 7388, introduced earlier in the house, Rep. Williams' sponsorship of the legislation is significant because he is chairman of the subcommittee which handles the legislation, and he can set the date for hearings and consideration.

Advances Pose New Problems

Rep. Williams pointed out in connection with the need for control legislation, that in recent years rapid advances have been made in the field of applied chemistry, and these advances, although generally beneficial to the public at large, have posed new problems which can be adequately dealt with only through public education and government regulation.

"There is a need for better public understanding of the fact that many chemicals can be hazardous if not properly handled, and that therefore such substances must be handled with intelligence and care," he said. "Most of us possess great respect for sharp tools and electrical devices. Chemicals, however, usually are innocent-appearing substances, and their properties and potential dangers often cannot be recognized merely by visual inspection.

"On the other hand, even potentially dangerous chemicals may be used again and again without hazard if the prescribed safety precautions regarding their use are observed."

Mr. Williams recalled that until 1952 voluntary agreements had been developed by the Surgeon General of the US and the chemical industry for protective labeling of certain chemicals. These agreements were discontinued when the number of products increased and the chemical in-

—*Continued on page 56*

American Alcolac Plans For Alkyl Amines Output

American Alcolac Corporation is now installing a new unit at its Baltimore, Md., plant to manufacture a broad range of alkyl amines. Pilot work has been completed on a novel process which the company has developed and it is anticipated that full-scale commercial production of amines will begin early this fall.

The first product the company will produce is lauryl dimethyl amine in both distilled and industrial grades. Subsequently, Alcolac will expand operations to include the production of other higher molecular weight alkyl amines.

The company plans to market its new line of products and their derivatives as intermediates for the manufacture of cationics, to the rubber and plastics industry, and as surface active agents for use in ore flotation.

McElroy to Head Defense

The nomination of Neil McElroy, president of Procter & Gamble Company, Cincinnati, Ohio, to succeed Charles E. Wilson as Secretary of Defense, was sent to the senate for confirmation by President Eisenhower last week.

AMOCO CHEMICALS DIRECTOR: R. L. Hockley, now a chemical industry consultant and formerly a vice-president of Olin Mathieson Chemical Corporation, who has been elected a director of Amoco Chemicals Corporation, Chicago.

American-Marietta To Enter Ink Field

American-Marietta Company, Chicago, is planning to enter the printing ink field through the acquisition of Sinclair & Valentine Company, New York. An agreement providing for the sale of the New York firms assets and business to American-Marietta was signed last week.

Directors of both concerns have unanimously approved terms of the transaction involving 209,969 American-Marietta common shares. Each Sinclair & Valentine common share is to be exchanged for 1.15 shares of American-Marietta. The proposal will be submitted to Sinclair & Valentine stockholders at a special meeting to be held on August 23.

Sinclair & Valentine is a leading manufacturer of printing inks, pigments and

—*Continued on page 59*

Phthalic Anhydride Plant Is Operating in California

Reichhold Chemicals' Azusa, Calif., plant has just gone on stream with production of phthalic anhydride, the first plant on the west coast to manufacture this basic chemical from naphthalene. Capacity of the Azusa plant will be 10 million pounds of phthalic anhydride annually.

Phthalic anhydride production facilities in Azusa represent an investment of almost $2 million. The White Plains, N.Y., firm said that production capacity would be sufficient not only to meet RCI's needs but would be large enough to permit sales of the chemical as a raw material for plastics being manufactured for the west coast's boat building, aircraft and building construction industries.

Reichhold Unit Offers Stock for Sale Abroad

Reichhold-Beckacite S. A., French affiliate of Reichhold Chemicals, Inc., White Plains, N. Y., has made its first public stock offering, placing 8,000 shares on the Paris Bourse.

The offering is in line with RCI's policy of gradually transferring a portion of its ownership interest in its foreign affiliates to nationals of the countries in which each of the plants is situated.

Ammonium Nitrate Now Being Used as a Blasting Agent

Use of ammonium nitrate fertilizer as a blasting agent is well beyond the field test stage and has become standard with many heavy construction contractors, quarry men and strip coal mine operators, according to Tom K. Smith, jr., director of marketing for Monsanto Chemical Company's inorganic chemicals division, St. Louis, Mo.

"This comparatively new method of open air or surface blasting has three major factors which contribute to its growing popularity," Mr. Smith points out. "It is extremely safe, it can be controlled by experienced powder men, and it is far cheaper than conventional blasting agents."

Ammonium nitrate fertilizer remains fertilizer until it is poured into blasting holes on the job, Mr. Smith says. There three conditions must prevail before it becomes an explosive: it must be mixed with the correct amount of fuel oil, it must be confined and it must be detonated by a charge of dynamite.

Because the "powder factor"—ratio of pounds of blasting agent to cubic yards of material to be blasted — is the same for ammonium nitrate fertilizer as it is for conventional blasting agents, powder men find the change to the new method of blasting an easy one, Mr. Smith reports.

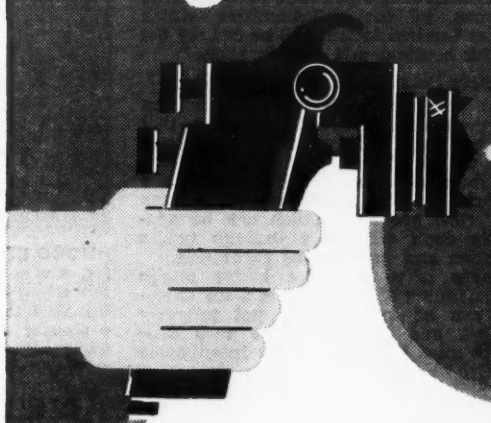
"Years of experience have taught good powder men how to control a blast to

—*Continued on page 71*

CSC NITROPARAFFINS as solvents in VINYL COATINGS

offer 5 important advantages!

1. *Lower Viscosity!*
2. *Higher Solids!*
3. *Slower Evaporation Rate and Better Flow!*
4. *Less Solvent Retention!*
5. *Reduced Odor Problems!*



Studies at CSC's Lacquer Laboratories show that 2-Nitropropane and Nitromethane outperform the ketones in the preparation of vinyl spray formulations. Formulators can now take fullest advantage of the superiority of CSC Nitroparaffins in producing high-quality vinyl coatings.

High solids vinyl formulations prepared with 2-Nitropropane have good stability and show no tendency to gel during storage. 2-NP resin solutions are considerably lower in viscosity than mixtures based on medium-boiling ketones, allowing higher weights of solids in a given volume of lacquer and thus greater surface coverage.

The higher evaporation rates of the ketones normally used are serious handicaps leading to rapid setting up of films and poor flow. Flammability is a constant fire hazard. The slow evaporation rate of 2-NP and Nitromethane solutions produce good flow. The NP's have mild, agreeable odor and escape more rapidly when drying, eliminating odor problems. High flash points and low volatility are added safety features.

2-Nitropropane and Nitromethane are also excellent solvents for acrylics, cellulose acetate, cellulose acetate butyrate, and epoxy resins.

A CSC technical representative will be glad to work with you on your specific problems.

DISCOVER THE NITROPARAFFINS!

INDUSTRIAL CHEMICALS DEPARTMENT

COMMERCIAL SOLVENTS CORPORATION

260 MADISON AVE., NEW YORK 16, N. Y.

Atlanta • Boston • Chicago • Cincinnati • Cleveland • Detroit • Houston • Indianapolis • Kansas City • Los Angeles
Louisville • Memphis • Milwaukee • Minneapolis • Newark • New Orleans • New York • Pittsburgh • St. Louis • San Francisco
In Mexico: Comsolmex, S. A., Mexico 11, D.F.

Association Meetings

Gordon Research Conferences of the American Association for the Advancement of Science, New London, New Hampden, and Meriden, N. H., August 12-16, August 19-23, August 26-30.

American Association of Textile Chemists and Colorists, national convention, Statler hotel, Boston, Mass., November 14-16.

American Chemical Society, national meeting, New York, September 8-13.

American Coke and Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 21-22.

American Institute of Chemical Engineers, annual meeting, Conrad Hilton hotel, Chicago, December 8-11.

American Oil Chemists' Society, fall meeting, Netherland Hilton hotel, Cincinnati, Ohio, September 30-October 2.

American Soybean Association, combined annual meeting with National Soybean Processors Association, Leamington hotel, Minneapolis, Minn., August 26-28.

Antibiotics Annual Symposium, sponsored by antibiotics division of Food and Drug Administration, Willard hotel, Washington, D. C., October 2-4.

Association of American Feed Control Officials, Shoreham hotel, Washington, D. C., October 15-17.

Association of American Pesticide Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 18-19.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Belmont-Plaza hotel, New York, October 22.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 15.

Chemical Industries Exposition, Coliseum, New York, December 2-6.

Chemical Market Research Association, Lake Placid Club, Lake Placid, N. Y., September 16-17.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Electrochemical Society, Statler hotel, Buffalo, N. Y., October 6-10.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Industrial Hygiene Foundation, annual meeting, Mellon Institute, Pittsburgh, Pa., October 30-31.

National Agricultural Chemicals Association, annual meeting, Essex and Sussex hotel, Spring Lake, N. J., September 4-6.

National Association of Retail Druggists, annual convention, Minneapolis, Minn., October 6-10.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Petroleum Association, annual meeting Traymore hotel, Atlantic City, N. J., September 11-13.

Paint Industries Show, sponsored by Federation of Paint and Varnish Production Clubs, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Pan-American Congress of Pharmacy and Biochemistry, Mayflower hotel, Washington, D. C., November 3-9.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, October 14.

Society of Chemical Industry, American section, chemical industry award dinner, Waldorf-Astoria hotel, New York, October 18.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon, Roosevelt hotel, New York, September 10.

Dyes Picture Was a Bit Faded During the Past Year as Output Showed 9.5 Percent Decrease

The production and sales picture for dyes in the United States last year was somewhat faded. That's what the Tariff Commission shows in its tenth synthetic organic chemicals report. The not-so-bright picture indicates that total domestic output of dyes in 1956 was 152 million pounds—or 9.5 percent less than the 168 million pounds produced in 1955. Sales of dyes amounted to 155 million pounds, valued at $185 million in 1956, compared to 156 million pounds, valued at $184 million, in 1955.

The production of dyes grouped by color index number was 109 million pounds in 1956, compared with an output of 119 million pounds in 1955—a decline of 8 percent. Sales of color index dyes totaled 112 million pounds, valued at $99 million, in 1956, compared with 111 million pounds, valued at $97 million, in 1955—an increase of 1 percent in quantity and 2 percent in the value of sales.

Prototypes Suffer the Most

Production and sales of prototype dyes showed the greatest decreases. The output of prototype dyes in 1956 was 28 million pounds, or 15 percent less than the 33 million pounds produced in 1955. Sales of these dyes in 1956 totaled 28 million pounds, valued at $51 million, compared with 31 million pounds, valued at $54 million, in 1955. Production of ungrouped dyes in 1956, totaled 15 million pounds, compared with 16 million pounds in 1955. Sales of these dyes in 1956 amounted to 15 million pounds, valued at $36 million, compared with 15 million pounds, valued at $33 million, in 1955.

Among the individual dyes for which statistics are given in the report, substantial increases in production were reported for many low- and medium-priced dyes. The output of sulfur black was 16.8 million pounds in 1956, compared with 16.3 million pounds in 1955, and 11.5 million pounds in 1954; the output of direct white dyes was 3.6 million pounds in 1956, compared with 3.1 million pounds in 1955 and 1.4 million pounds in 1954.

Increased output in 1956, compared with 1955, was reported also for acid black 10B (C.I. dye 246) (an increase of 23 percent); indanthrene olive T (Pr. dye 547) (an increase of 19 percent); and Sudan I (C.I. dye 24) (an increase of 18 percent).

On the other hand, the production of many important dyes declined in 1956. The output of synthetic indigo in 1956 was

—Continued on page 51

ASS'T GENERAL MANAGER: Dr. Jerome J. Van Gasse, appointed assistant general manager of Pfizer Laboratories, division of Chas. Pfizer & Co., Brooklyn, N. Y.

Cyclic Intermediates Production, Up 10 Per Cent, At Peak Last Year

Production of cyclic intermediates set a new record in the United States last year, according to the Tariff Commission. Total output in 1956 was 6,600 million pounds, or 10 percent more than the previous high of 6,016 million pounds reported for 1955. About three-fifths of last year's production was captive (i.e., consumed by the producing concerns themselves in further manufacture) and the remainder was sold. Sales of cyclic intermediates in 1956 amounted to 2,556 million pounds, valued at $444 million, compared with 2,285 million pounds, valued at $408 million, in 1955.

In 1956 the output of many individual intermediates was substantially larger than it was in 1955. Production of each of two intermediates exceeded one billion pounds in 1956. The output of styrene totaled 1,176 million pounds (an increase of 16 percent compared with 1955) and that of ethylbenzene, 1,171 million pounds (an increase of 8 percent). Ethylbenzene is used almost entirely in the manufacture of styrene. Styrene, in turn, is used in the manufacture of plastics materials and synthetic rubber.

Production of dodecylbenzene, which is used chiefly in the manufacture of surface-active agents, amounted to 486 million

—Continued on page 56

TECHNICAL SALES HEAD: Henry C. Steffen, who has joined Columbian Carbon International, Inc., New York, as director of technical sales and service for the rubber industry.

Rubber Research Lab Is Bought by Firestone

Sale of the government's rubber research laboratory at Akron, Ohio, to Firestone Tire & Rubber Company, has been authorized by General Services Administration for a bid of $760,000.

Besides Firestone, the other bidders were Thiokol Chemical Company, Trenton, N.J., which offered $251,278, and Robert G. Dunlop, doing business for Smithers Laboratories, Akron, Ohio, who offered $245,000.

Sale of the facilities and transfer of title is subject to clearance by the Department of Justice from the antitrust angle. This is now being awaited.

Chemical Plant Risks Are on Safety Agenda

How can health hazards in chemical plants be controlled? What are the hazards of static electricity in chemical plants? What precautions should be taken in using chlorinated solvents? Answers to these and other questions will be given at chemical section sessions at the forty-fifth annual National Safety Congress in Chicago October 21 to 25.

The congress, annual get-together of 12,000 safety men from throughout the United States, also will feature sessions of general industrial interest, sponsored by the American Society of Safety Engineering.

Topics to be discussed in the general sessions will include noise control, vision

—Continued on page 52

Spencer Producing Nylon At Henderson, Ky., Plant

Production of nylon has commenced at Spencer Chemical Company's new nylon plant at Henderson, Ky. The facility is producing nylon resins which will be used for a variety of molding and extrusion applications.

A pilot size nylon production unit has begun operating at Henderson. This one will study ways to provide new and improved nylon resins.

The new plant is operated under license agreement with Onderzoekingsinstituut N. V. Research, an affiliate of Algemene Kunstzijde, N V. (AKU) of Arnhem, Holland.

Spencer produces nylon from caprolactam, which is polymerized in the new plant. The finished product, known as nylon-6 and tradenamed "Spencer Nylon," is a plastic used for a broad variety of end uses.

MCA Adds to Its Staff

Elkins Oliphant 2nd, has joined the staff of the Manufacturing Chemists' Association as public relations representative. He had been associated with the Nitrogen Division of Allied Chemical & Dye Corporation, New York.

Selenium Important In Nutrition of Chicks

Selenium, well-known for its use in photo-electric cells and other electronic devices, has been found to be important in the nutrition of young chickens when used in minute amounts. This news comes from a trio of researchers at the Pearl River, N. Y., laboratories of American Cyanamid Company.

The researchers—E. L. Sokstad, E. L. Patterson and R. Milstrey—reported to the Poultry Science Association in Columbia, Mo., last week that small amounts of selenium in a special diet fed to young chickens produce the same nutritional effects as does vitamin E. Selenium was fed in the form of sodium selenite.

As this is a highly toxic substance, the amount used must be rigidly controlled. As little as one part of selenium in 10 million parts of diet produced the beneficial effect.

It has long been known that amounts

—Continued on page 51

Diamond Black Leaf Plans To Shut Nicotine Facility

Diamond Black Leaf Company, Cleveland, Ohio, plans to close its nicotine extraction plant at Richmond, Va.

Suspension of production operations at the thirty-nine-year-old plant is due "chiefly to uncertainties presently governing the nicotine and ground stem tobacco market in the eastern United States, a condition resulting from the steady decline of the market in recent years," company officials said.

The shut-down will not affect the company research and development group or its eastern district sales office, both of which are also located at Richmond. Production will stop as soon as the present raw material inventory is depleted during the next ten days or two weeks.

DCAT Probes Expense Accounts—for Company Policy

The Drug, Chemical and Allied Trades section of the New York Board of Trade has taken a look into the business of salesmen's expense accounts—not to see what the salesmen are doing about them, but to see what their companies are doing.

Three hundred and twenty companies, 184 of them having their offices within a seventy-five mile radius of New York city, participated in the survey. The other 136 companies represent all sections of the country.

The survey disclosed that 41 percent of salesmen are using their personal cars, for which they are compensated by the employer, chiefly by mileage allowances. Seven cents per mile is the payment made most generally, although in New York area 27 percent of the companies pay their salesmen 8 cents. Only 19 percent of the employers make a direct payment for depreciation of salesmen's cars, most including that in the mileage allowance.

Payment for liability and property damage insurance on personally-owned cars is made by 58 percent of the firms, 47 percent also providing comprehensive fire and theft coverage and 42 percent assuming the cost of medical expense riders on automobile policies.

Throughout the country, between 78 and 86 percent of the employers reimburse salesmen for parking fees, bridge tolls and overnight garaging. This percentage is higher in the New York metropolitan area where between 81 and 90

—Continued on page 52

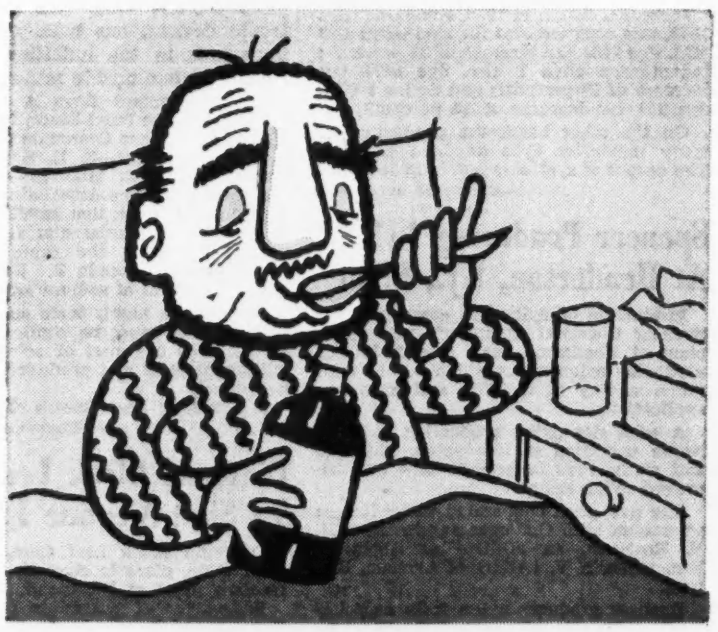
The Satisfied Consumer

CANDIDATE FOR PYRILAMINE MALEATE

Pyrilamine answers important needs for antihistamine therapy because of outstanding effectiveness and compatibility with a variety of other pharmaceuticals.

"SURE IT'S GOOD—THOUSANDS USE IT"

Pyrilamine is the most favored antihistamine, employed in more formulations and by more manufacturers than any other antihistamine today.



ROAD TO RECOVERY

Pyrilamine is a superior antihistamine. It is remarkably well tolerated, the occurrence of drowsiness in particular being notably low.

THE SATISFIED CONSUMER

And you, too, will be satisfied with Pyrilamine, whether formulated in cold tablets, cough syrups, nasal preparations, ointments, lotions or creams. Check your Merck representative for the details.

PYRILAMINE MALEATE MERCK

builds acceptance for antihistamine formulations

MERCK & CO., INC. • Chemical Division • RAHWAY, NEW JERSEY

© Merck & Co., Inc.

CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, August 9 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, ens ..... lb. 4.25 - 5.00
Abietic acid, coml., dms., c.l., works lb. .12 - —
dms., l.c.l., ex whse lb. .1490- —
Cryst., dms., c.l., works lb. .06½- —
dms., l.c.l., works lb. .07 - .07¼
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
dms., l.c.l., works lb. .13¼- —
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .30½- —
bbls., bgs., ton lots, frt. alld. lb. .31½- —
bbls., bgs., smaller lots, frt. alld lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
bbls., smaller lots lb. .80 - .81
Acetic acid, coml. or redist, 28%, bbls 100 lbs. 4.80 - —
56%, bbls. 100 lbs. 8.25 - —
70%, bbls. 100 lbs. 9.95 - —
80%, bbls. 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd 100 lbs.13.75 - —
dms., l.c.l., dlvd 100 lbs.14.25 - —
tanks, dlvd. 100 lbs.10.00 - —
USP, cbys., incl., dlvd 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .17½- —
tanks, dlvd. E. lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l. dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .11 - —
dms., l.c.l., dlvd lb. .12 - —
tanks, dlvd lb. .08¼- —
Acetonitrile, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.22 - 1.24
Acetophenone, cns., dms. lb. 1.60 - 1.70
Tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63 - —
USP, standard, fine, cryst. gran., (30-40 mesh) powd., (80 mesh), bbls., 1,000-lb. lots, same basis lb. .59 - —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40 - —
tanks, frt. alld. E. of Denver lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —

Acids

Acid quotations, formerly grouped under one heading, are now listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
dms., l.c.l., works lb. .47½- —
tanks, works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., t.l., frt. equald lb. .31 - —
tanks, frt. equald lb. .27 - —
ACTH, cryst., bulk, 1,000 units gram, bots gram.15.00 - —
Adeps lanae (see Lanolin).

Abies Siberica Oil—Ammonium Acetate

Adipic acid, bgs., c.l., dlvd. lb. .32 - —
bgs., l.c.l. dlvd. lb. .34¾- —
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 2.00 - —
powd., 30 mesh., fib., dms lb. 2.50 - —
dl-Alanine, dms., works lb. 9.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. lb. .65 - .85
Egg, edible, cryst., powd., bbls. lb. 1.28 - 1.30
flake lb. 1.22 - 1.26
tech., cryst., bbls lb. 1.08 - 1.10

Alcohols

Alcohol quotations, formerly grouped under one heading, are now listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldol, 95%, dms., works lb. .23 - —
Denaturing grade, dms. gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .90 - —
fib. dms., l.c.l., dlvd. lb. .95 - 1.05
Aletris root, bgs. lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. N. of Tenn. and N.C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. 2.25 - —
Alkali blue toner, litho flushed, 125-lb. bbls., same basis. lb. 1.28 - —
Alkali blue dlvd. prices ½c. higher Ala., Fla. Ga., La. (Shreveport 1¼c.), Miss., N.C., S.C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City Wichita, frt. equald. with Chicago.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms. frt. alld. lb. .95 - 1.10

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l., dlvd lb. .32½- —
dms., l.c.l., dlvd. lb. .33½- —
tanks, dlvd. lb. .30 - —
Allyl bromide, 55-lb. cbys., 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs., works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb. 3.00 - 3.75
NF, bots. lb. 3.25 - 3.75
USP, sweet, cns., dms. lb. 1.45 - 1.50
Aloe, Cape, cs. lb. .50 - —
powd., cs. lb. .65 - —
Curacao, kgs. lb. .60 - —
Aloin, USP, bbls., dms., kgs. lb. 3.50 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs 5.20 - —
USP, burnt, dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms lb. .07¾- .08
Alum, potash-chrome, dms lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0475- —
bgs., l.c.l., works lb. .0550- .0775
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works, frt. equald. lb. .16½- —
cryst., dms., c.l., works 100 lbs.16.00 - —
dms., l.c.l., works 100 lbs.16.50 - —
soln. 32°, cbys., c.l., works lb. .0445- —
cbys., l.c.l., works lb. .0520- .1290
tanks, works 100 lbs. 3.45 - —
NF, gran., dms., works lb. .29 - .30
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
bgs., l.c.l., works lb. .17¾- .1934
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .12½- —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0335- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0360- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0460- —
bulk, c.l., same basis lb. .0310- —
Aluminum hydroxide, dried, USP XV, fib dms. works lb. .82½- —
fib dms., contract, works lb. .79½- —
Gel, pharmaceutical, 14-15% Al.O., fib. dms., works lb. .22 - —
fib. dms., contract works. lb. .21 - —
9-9½% Al.O., fib dms., works. lb. .19 - —
fib. dms., contract, works. lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2810- —
pigs, 10,000-lb. lots, frt. alld lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb. 1.11½- —
Standard grade, dms lb. .81½- —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.
Aluminum resinate, precip., 2.1% t.t.l., dms lb. .33 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Monobasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Tribasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Aluminum sulfate, coml., grd., bgs., c.l., works, frt. equald ton.41.00 - —
grd., bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
Iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 3.95 - 4.55
USP, gran., dms., works lb. .29 - .30
powd., dms., works lb. .36 - .37
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.60 - —
dms., smaller lots, works lb. 2.65 - 2.75
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd. lb. .485 - —
tanks, dlvd. lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. lb. .45 - —
tanks, frt. alld lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. 1.15 - —
Aminophylline, USP, 100-lb. dms lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.70 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.80.00 - —
refrigeration tanks works, frt. equald ton.82.50 - —
Aqueous, tanks, works, anhyd. basis ton.83.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 9.25 - —
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms. lb. .41 - —

Ammonium benzoate, USP, fib. dms., ton lots, works lb. 1.00 - —
fib. dms., 1,000-lb lots, works, lb. 1.05 - —
Ammonium diborate, gran., dms., c.l., works ton.319.50 - —
dms., ton lots, ex whse ton.397.00 - —
dms., smaller lots, ex whse ton.402.00 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works 100 lbs. 9.00 - —
Ammonium bichromate, dms., works, lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., bbls, lb. .45 - —
Powdered ammonium bromide 10c. per lb. higher
Ammonium carbonate, USP, lump, dms lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 - —
l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., fib. dms lb. .17¼- —
Ammonium citrate, dibasic, bbls lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium hydroxide (see Ammonia aqueous)
Ammonium hypophosphate NF, dms. lb. 3.07 - —
Ammonium iodide, NF dms., bots. lb. 4.26 - 4.38

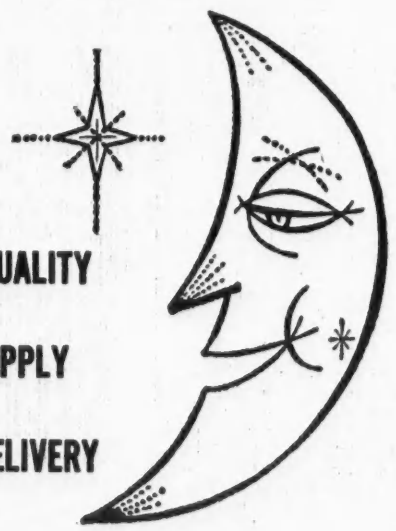
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib. dms., 15,000 lbs., works lb. 1.22 - —
fib. dms., 2,000-lb. contracts, works lb. 1.23 - —
single fib. dm., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., western works, frt. equald, base price ton.64.00 - —
USP, gran., bbls., dms. lb. .17¼- —
Ammonium nitrate, imp. Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton base price ton.64.00 - —
August discount ton. 5.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va ton.51.00 - —
Ammonium oxalate, fine gran., dms. lb. .26½- .31
Ammonium pentaborate, gran., bgs., c.l., works ton.187.50 - —
bgs., ton lots, ex whse ton.273.50 - —
bgs., smaller lots, ex whse ton.278.50 - —
Ammonium pentaborate powder $10 per ton higher.
Ammonium persulfate, tech., dms., 10-ton lots or more, works, lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —

Ammonium phosphate, dibasic, NF, V bbls., dms. lb. .46 - —
Tech, bgs., c.l., works, frt. equald, lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- —
Ammonium sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 - —
purif., dms., works lb. .10 - .10½
Syn., bulk, c.l., works ton.34.00 -42.00
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Ammonium sulfocyanide, tech (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .32 - .36
Ammonium thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.68
Highly purif., cbys., 100% basis, lb. 1.70 - 1.96
d-Amphetamine hydrochloride, di-basic bots lb.18.00 -28.00
dl-Amphetamine hydrochloride, di-basic, bots lb. 4.50 - 6.00
d-Amphetamine hydrochloride, mono-basic,, bots lb.18.00 -28.00
dl-Amphetamine phosphate bots lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.14.50 - —
d-Amphetamine sulfate, fib. dms., 100-lbs. lots lb.16.50 - —
dl-Amphetamine sulfate, fib. dms., lb. 4.50 - 6.00

Amyl acetate, ex fusel oil, tech., dist. from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
Ex pentane, reg. dms., c.l., dlvd, lb. .18½- —
dms., l.c.l., dlvd lb. .19½- —
tanks, dlvd. lb. .16 - —
Amyl acetate, syn., exe process, dms., c.l., dlvd lb. .20¼- —
dms., l.c.l., dlvd lb. .21¼- —
tanks, dlvd. lb. .17¾- —
Tech., dms., c.l., dlvd lb. .16½- —
dms., l.c.l., dlvd lb. .17½- —
tanks, dlvd. lb. .14 - —
Amyl alcohol, ex fusel oil (see Fusel oil, refd.).
Amyl alcohol, ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45 - —
Ex-pentane, mixed amyls, dms., c.l., frt. alld lb. .18½- —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld, lb. .19¾- —
dms., l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld E lb. .18½- —
dms., l.c.l., frt. alld E lb. .19½- —
tanks, frt. alld. E lb. .16 - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-Pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl cinnamic aldehyde, dms. lb. 1.25 - 1.70
Amyl salicylate, cns., dms. lb. .82 - 1.10
o-tert-Amyl phenol, dms., c.l., works, lb. .49½- —
dms., l.c.l., works lb. .50½- —
tanks, works lb. .47 - —
p-tert-Amyl phenol, dms., c.l. works, lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
tanks, works lb. .25¾- —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyris oil, dms lb. 1.25 - 1.55
Anethol, cns., dms lb. 1.80 - —
Tech., dms. lb. 1.50 - —
Angelica root, dom., bls lb. .60 - .65
Angelica root oil, bots. lb.120.00 -130.00
Angelica seed oil, bots. lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .22 - —
dms., l.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .20 - —
tankwagons, min. 2,000 gals lb. .20½- —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld, lb. .33 - —
dms., l.c.l. same basis lb. .35 - —
Anise oil, USP, dms lb. 2.50 - 3.00
Anise seeds, Mexican, bgs lb. .19 - —
Spanish, bgs. lb. .19 - —
Syrian, bgs. lb. .19 - —
Anise aldehyde, bots., dms lb. 2.30 - 2.70
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs. lb. .15 - .17
Anthracene, 90-95%, bbls., ton-lots, works lb. .83 - —
bbls., smaller lots, works lb. .95 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines lb. .33 - —
cs., c.l., mines lb. .33½- —
Antimony oxide, bgs., c.l., frt. alld, lb. .27 - —
bgs., l.c.l., frt. alld. lb. .28½- —
Antimony sulfide, approx. 65%, bgs., dlvd lb. .23 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms lb. .69½- .74½
USP, powd., dms. lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls. lb. 3.50 - —
Apomorphine hydrochloride USP 25-oz. lots oz.35.60 - —
Apricot kernel oil USP, dms lb. .75 - .90
Arabic gum, amber, sorts, bgs. lb. .21 - .23
USP, powd., bbls. lb. .27 - .29
Areca nuts powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 - —
Arnica flowers (true Montana), bls. lb. 1.40 - 1.50
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms. lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls lb. 2.85 - —
Maroon shade, bbls lb. 3.70 - —
Asafetida, cn lb. .40 - —
Powd., bbls., dms lb. .85 - —
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude,
6D, c.l. (30 tons), mines ton.82.00 - —
7D, c.l. (30 tons), mines ton.72.00 - —
7F, c.l. (30 tons), mines ton.68.25 - —
7H, c.l. (30 tons), mines ton.58.00 - —
7K, c.l. (30 tons), mines ton.48.30 - —
7M, c.l. (30 tons), mines ton.42.00 - —
7R, c.l. (30 tons), mines ton.41.00 - —
7RF, c.l. (30 tons), mines ton.42.00 - —
7T, c.l. (30 tons), mines ton.39.00 - —
7TF, c.l. (30 tons), mines ton.42.00 - —
Asbestos prices are in US funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 25-100 kilo lots kilo.12.00 - —
dms., 10-kilo lots kilo.12.35 - —
dms., 5-kilo lots kilo.12.75 - —
bots., 1-kilo lots kilo.13.00 - —
bots, 500-gram lots kilo.13.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton.35.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295° F. fusing pt., bgs. c.l., mines ton.40.00 - —

sure as day

follows night—



YOU CAN DEPEND ON PUBLICKER

UNIFORM QUALITY

STEADY SUPPLY

PROMPT DELIVERY

- *Ethyl Alcohol*
- *Butyl Alcohol*
- *Butyl Acetate*
- *Acetaldehyde*
- *Ethyl Acetate*
- *Amyl Acetate*
- *Acetone*
- *Acetic Acid*
- *Refined Fusel Oil*

PUBLICKER INDUSTRIES Inc.

1429 WALNUT STREET, PHILADELPHIA 2, PA.

NEW YORK • NEW ENGLAND • MID WESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022
CHICAGO—RANDOLPH 6-6678

Asphalt, manjak, No. 10, crude, dms., works lb. .06¼ - —
Petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion, tanks, tankwagon, refy. gal. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton 21.00 - —
85-300 penetration, tanks, tankwagon, refy ton 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 4.00 - 4.50
Atropine sulfate, USP bots oz. 2.00 - 2.45
Avocado oil, crns lb. 3.25 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .63 - —
less than 1,000,000,000 units, 50,000 units. .70 - —
Balm of Gilead buds, dried bgs lb. 1.35 - 1.45
Barberry root bark bgs lb. .28 - .30
Barbital, NF 100-lb. dms lb. 4.50 - —
Barbital sodium NF dms lb. 4.75 - —
Barium carbonate, precip., bgs. c.l., works ton 106.50 - —
bgs., smaller lots works ton 121.50 - —
Barium chlorate, dms. works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton 176.00 - —
bgs., l.c.l. works ton 191.00 - —
NF, cryst., 100-lb. dms lb. .22 - —
Tech., cryst., bgs. c.l., works, 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 7.75 - —
Barium chromate, bgs. frt. equald. lb. .35 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l. t.l. frt equald ton 208.00 - —
bgs., l.c.l., t.l.l., frt. equald ton 218.00 - —
Barium monoxide (see Barium oxide).
Barium nitrate bbls. c.l. t.l. dlvd. lb. .16 - —
bbls., l.c.l. t.l.l., dlvd lb. .17 - —
Barium oxide grd., dms., c.l., t.l., frt. equald ton 275.00 - —
dms. l.c.l. t.l.l. frt. equald ton 285.00 - —
Barium peroxide, dms. frt. equald. lb. .20 - —
Barium stearate ctns. c.l. frt. alld. lb. .41 - —
ctns., l.c.l. same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate X-ray dms lb. .15 - .15½
Barium sulfide, dms., c.l., works ton 95.00 - —
dms., l.c.l. works ton 105.00 - —
Barytes, southern off-color, bgs., mines ton 25.00 - —
95-75%, bgs., mines ton 25.00 - —
water-grd., paper bgs., c.l., St. Louis ton 55.00 - —
paper bgs., ex whse, New York ton 78.85 - —
Battery acid, cbys., c.l., works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E 100 lbs. 2.65 - 3.45
Bauxite, bulk, mines ton 6.75 - 10.00
Bay leaves (see Laurel leaves).
Bay oil, NF Puerto Rican 50-55%, crns lb. 2.15 - 3.00
Puerto Rican, 55-60%, crns lb. 2.50 - 3.00
West Indian, 50-55%, crns., dms., lb. 1.85 - 2.40
Bayberry wax, bgs lb. .45 - .47
Beeswax, crude, African, bgs. lb. .63 - .65
Brazilian, bgs lb. .66 - .68
Central American, bgs lb. .63 - .67
Chilean, bgs lb. .66 - .68
Refd., USP, bleached, white, bricks, 100-lb. ctns lb. .78 - .81
white, slabs, 100-lb. ctns lb. .77 - .80
yellow bricks, 100-lb. ctns lb. .71 - .74
yellow slabs, 100-lb. ctns .70 - .73
Belladonna leaf, bls lb. .35 - .37
Belladonna root, bls lb. .45 - .50
Bentonite, dom. 200 mesh, bgs., c.l., mines ton 14.00 - —
Imp., Italian white, high gel., bgs., 5-ton lots, ex whse ton 84.00 - —
bgs., 1-ton lots, ex whse. ton 87.00 - —
low gel. bgs. 5-ton lots, ex whse ton 82.35 - —
bgs. 1-ton lots ex whse. ton 85.35 - —
Benzal chloride, cbys. works lb. .44 - —
Benzaldehyde, NF, dms. lb. .80 - .85
Tech., cbys., dms., t.l. lb. .43 - —
cbys., smaller lots lb. .44 - —
Benzene, coaltar pure or nitration, tanks, works:—
Bethlehem, Pa gal. .36 - —
Birmingham district gal. .36 - —
Chicago district gal. .36 - —
Cleveland district gal. .36 - —
Geneva, Utah gal. .36 - —
Johnstown, Pa gal. .36 - —
Lackawanna, N. Y gal. .36 - —
Lone Star, Tex gal. .36 - —
Lorain, Ohio gal. .36 - —
Middletown, Ohio gal. .36 - —
Minnequa, Colo gal. .36 - —
Philadelphia district gal. .36 - —
Pittsburgh district gal. .36 - —
Sparrows Point, Md. gal. .36 - —
Syracuse, N. Y gal. .36 - —
Terre Haute, Ind gal. .36 - —
Youngstown, Ohio gal. .36 - —
Benzene, petroleum, Houston, Tex., tanks gal. .36 - .38
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd. gamma unit-lb. .0075 - .008
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l., dlvd. gamma unit-lb. .0075 - —
dms., l.c.l., works. gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd lb. 2.45 - —
Lightfast, bbls., dlvd lb. 3.25 - —
Benzocaine, dms lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms. 100-lb. lots or more lb. .54 - —
Benzoin gum Sumatra cs lb. .33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may now be found under Benzene.

Benzophenone, dms lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —

Benzoyl chloride, cbys., dms., c.l., works, frt. equald. lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., crns., dms. lb. .79 - 1.19
Benzyl alcohol, NF, dms. lb. .75 - .90
Tech., dms., dlvd. lb. .47½ - .49
Benzyl benzoate, NF, f.f.c., 500-lb. dms lb. .75 - 1.13
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald lb. .22½ - .25½
cbys., dms., l.c.l. same basis lb. .23½ - .25½
tank trucks, dlvd. Metropolitan area lb. .21 —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, crns lb. 3.60 - 3.90
Benzyl dimethylamine, dms., works, lb. 2.25 - —
Benzyl formate, crns lb. 2.10 - —
Benzyl isoeugenol, crns lb. 9.85 - —
Benzyl propionate, bots lb. 1.35 - 1.65
Benzyl salicylate, bots lb. 1.60 - 1.85
Benzylidine acetone, bots lb. 1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).
Berberine bisulfate, crns lb. 35.00 - 36.25
Berberine hydrochloride, bots. lb. 35.00 - 36.25
Bergamot oil, nat. NF, Italian, crns. lb. 10.25 - 12.25
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).

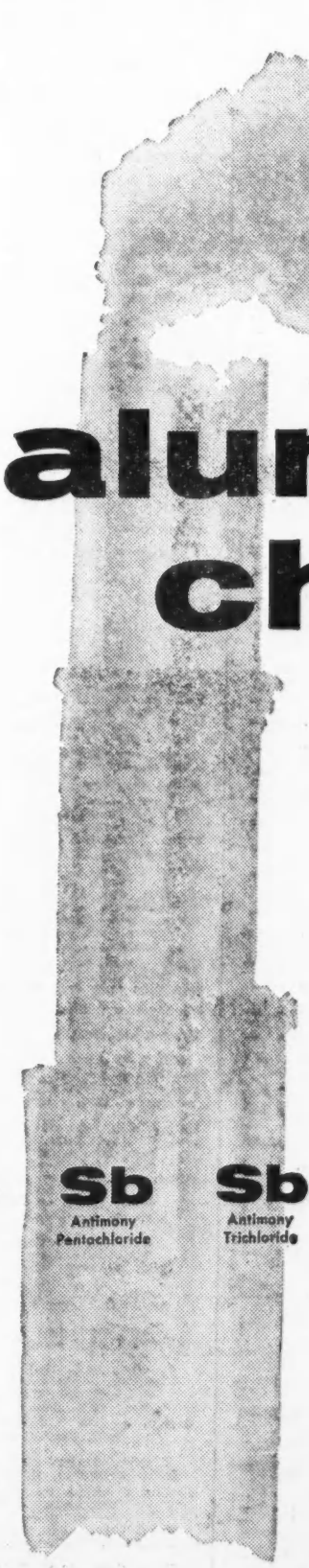
Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 - —
Betaine hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 - —
Betaine monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 - —
Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, crns. lb. 1.50 - 1.90
Rectified, crns. lb 1.75 - —
Bismuth chloride, jars lb 5.11 - —
Bismuth hydroxide dms. lb. 4.63 - —
Bismuth metal, bxs., ton lots lb 2.25 - —
Bismuth nitrate, cryst., dms. lb. 2.10 - 2.17
Bismuth oxide, anhyd., dms lb 4.47 - 5.05
Bismuth oxychloride, dms. lb 4.37 - 4.42
Bismuth subcarbonate, USP dms lb 3.20 - —
Bismuth subgallate, NF, fib. dms lb. 3.15 - —
Bismuth subiodide, fib. dms lb 5.37 - —
Bismuth subnitrate, NF, dms lb 2.65 - —
Bismuth subsalicylate, USP, dms lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., frt. alld. lb. .29¾ - —
bgs., l.c.l., same basis lb .30¾ - —

Blackberry root bark, bls. lb. .45 - —
Black haw root bark, bls lb .63 - .65
Black haw tree bark, bls. lb. .42 .50

Black Pigments

Black pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton 110.00 —
bgs., l.c.l., works ton 120.00 - —
bgs., l.c.l., New York whse ton 155.00 - —
Blood, dried, 16-16½% ammonia, unit-ton 5.50 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton 6.00 - —
Blood, dried, soluble, bgs., c.l lb. .13 - .14
bgs., t.l lb. .15 - .17
bgs., l.c.l lb. .15½ - .35½
Bloodroot, bls lb. .48 - .50



now!
aluminum
chloride

ANTIMONY TRICHLORIDE
ANTIMONY PENTACHLORIDE

You can now order any grade or quantity of any of seven Stauffer metallic chlorides from greatly expanded Stauffer facilities.

Stauffer's Aluminum Chloride is shipped in various mesh sizes from Houston, Baton Rouge, Niagara Falls and Elkton, Md., in steel drums of 50 to 600 pounds net. The purity of Stauffer Aluminum Chloride exceeds all standard specifications for use in petroleum refining and other organic reactions.

Send for an interesting report, "Aluminum Chloride as a Catalyst".

Stauffer's Antimony Trichloride for catalytic use is delivered solid or as flakes in drums of 50 and 100 pounds net, solid also in drums of 700 pounds net from Niagara Falls. Typical purity is 99.60%.

Al Aluminum Chloride
Sb Antimony Pentachloride
Sb Antimony Trichloride
B Boron Trichloride
Si Silicon Tetrachloride
Ti Titanium Tetrachloride
Zr Zirconium Tetrachloride

STAUFFER CHEMICAL COMPANY
380 Madison Avenue, New York 17, N. Y.
Prudential Plaza, Chicago 1, Ill.
636 California Street, San Francisco 8, Calif.

Stauffer CHEMICALS SINCE 1885

Blue Dyes—Chamomile Flowers

Blue Pigments

Blue pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate).
Bois de rose oil, dms. ..... lb. 3.40 - 3.70
Mexican (see Lignaloe wood oil).
BON acid maroons pure, bbls lb 1.75 —
Resinated, bbls lb. 1.50 —
Bone black, dms., l.c.l., frt. alld lb. .17 - .23¼
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.60.00 —
Bone oil, dms., works ..... lb. .65 .70
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic)
Borax, tech., anhyd. 99%, bgs., c.l., works ton.83.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.137.25 - —
anhyd., 99½%, bgs., smaller lots, same basis ton.142.25 - —
bulk, c.l., works ton.74.00 —
Tech., cryst., 99½%. bgs., c.l., works ton.71.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.125.25 - —
bgs., smaller lots, same basis ton.130.25 - —
gran., decahydrate 99½%, bgs., c.l. works ton.45.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.99.25 - —
bgs., smaller lots, same basis ton.104.25 - —
bulk, c.l., works ton.38.50 - —
pentahydrate, 99½%, bgs., c.l. works ton.60.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.114.25 - —
bgs., smaller lots, same basis ton.119.25 - —
bulk, c.l., works ton.53.50 - —
powd., 99½%, bgs., c.l., works. ton.50.00 - —
bgs., ton lots ex whse. New York or Chicago ton.104.25 - —
smaller lots, same basis ton.109.25 - —
USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt lb. .18 - .24
bgs., l.c.l., same basis ..... lb. .19 - .26
Boric acid, tech., 99.9% cryst., bgs., c.l., works ton.129.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.184.25 - —
bgs., smaller lots same basis. ton.189.25 - —
dms., c.l., works ton.153.50 -173.50
dms., ton lots, ex whse. New York or Chicago ton.208.75 -228.75
dms. smaller lots same basis. ton.213.75 -233.75
99.9% gran., bgs. c.l., works ton.104.00 —
bgs., ton lots, ex whse. New York or Chicago ton.159.25 —
bgs., smaller lots, same basis. ton.164.25 —
dms., c.l., works ton.128.50 -148.50
dms., ton lots, ex whse, New York or Chicago ton.183.75 -203.75
dms., smaller lots same basis. ton.188.75 -208.75
bulk, c.l., works ton.98.00 - —
99.9%, powd., bgs., c.l., works. ton.109.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.159.25 - —
bgs., smaller lots, same basis. ton.164.25 —
dms., c.l., works ton.133.50 -153.50
dms., ton lots, ex whse., New York or Chicago ton.188.75 -208.75
dms., smaller lots, same basis. ton.193.75 -213.75
USP boric acid $25 per ton higher.
Borneol, cns. ..... lb. 2.75 - —
Boron trifluoride gas, cyls, truckload, works lb .62 - —
cyls., t.t.l., works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls ..... lb 1.76 - —
Bromine, purif., cs. c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms. c.l., t.l. dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb .22½ - —
Bromochloromethane, dms., c.l., frt. equald lb 48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb .47 - —
Bromoform, pharmaceutical grade, 100-lb cbys lb 1.80 1.90
Bromstyrol, bots. ..... lb. 5.70 - —
Brucine, cns., 100-oz. lots ..... oz. .15 - .20
Brucine sulfate, NF, cns., 100-oz. lots oz. .15 - .20
Buchu leaves, bls lb 1.30 —

Brown Pigments

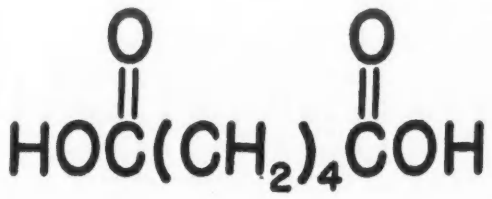
Brown pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, retd. cyls., c.l., refy lb .21 - —
cyls., l.c.l., refy lb .22 - —
tanks, contract refy. lb .14¾ - .15
Butane, indust., tanks, group 3 gal .05 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .14½ - —
Syn., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
sec-Synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16 - —
tanks, dlvd. lb. .12½ - —
tert-Synthetic, dms., c.l., frt alld. dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb .33¼ - —
Butyl lactate, dms., c.l., frt alld E. of Rockies lb .42½ - —
dms., l.c.l., same basis lb .43¼ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms lb. 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .25¾ - .26
dms., l.c.l., same basis lb. .26½ - .26¾
Butylamine (see Mono-, Di and Tributylamine).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol bgs., c.l., works. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 6.30 - —
Light shade, bbls., same basis lb. 5.90 - —
Medium shade, bbls., same basis. lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.35 - —
Cadmium CP yellow, all shades, bbls., frt. alld E of Rockies. lb. 2.85 - —
Cadmium iodide, 25-lb. fib. dms lb 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd lb. 1.70 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.70 - —
Cadmium-mercury lithopone red, dark shade, bbls. same basis. lb. 2.30 - —
Light shade, bbls., same basis lb. 1.85 - —
Medium shade, bbls., same basis. lb. 2.15 - —
Medium light shade bbls., same basis lb. 2.00 - —
Maroon shade, bbls., same basis. lb. 2.45 - —
Cadmium-selenide lithopone orange, deep shade, bbls., frt. alld. E of Rockies lb. 2.00 - —
Light shade, bbls., same basis. lb. 1.80 - —
Cadmium-selenide lithopone red, dark shade bbls., frt. alld. E. of Rockies lb. 2.93 - —
Light shade, bbls., same basis lb. 2.05 - —
Maroon shade, bbls., same basis. lb. 3.18 - —
Dark maroon shade, bbls., same basis lb. 3.27 - —
Medium shade, bbls., same basis. lb. 2.54 - —
Medium-light shade, bbls., same basis lb. 2.23 - —
Orange-red shade, bbls., same basis lb. 1.82 - —
Orange shade, bbls., same basis. lb. 1.66 - —
Cadmium-selenide lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.15 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.50 - —
cryst., hydrous, dms 100-lb lots or more lb. 2.33 - —
USP, syn., cryst., anhyd., dms., 100-lb lots or more lb. 2.50 - —
cryst., hydrous, dms. 100-lb lots or more lb. 2.33 - —
West coast prices 3c. per pound higher.
Cajeput oil, native, cns. ..... lb 1.75 3.30
Redist., USP, cns ..... lb. 2.10 - 2.25
Calamine, USP, dms. ..... lb. 34 —
Calamus oil, bots. ..... lb.12.00 -20.00
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
Vials, 25 to 100 gram lots, works gram. .65 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate, fib. dms., 100 lbs. or more frt adjusted lb. 4.00 - —
Calcium arsenate, dealers, bgs., c.l., frt alld lb. .09 .09½
bgs., l.c.l., same basis ..... lb. .10 - .10½
Calcium bromide, NF, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, dms., c.l., dlvd ton.134.40 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l. works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works. ton.32.50 - —
bgs., l.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 - —
surface treated bgs., c.l., works. ton.37.50 - —
bgs., l.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 160.00
bgs., l.c.l., works ton.120.00 175.00
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Gran., purif., dms. ..... lb. .27 - —
Calcium chloride, liquor, 40%, tanks, frt. equald ton.12.50 - —
Pellets, bgs., c.l., works ton.37.80 - —
Calcium chloride, powd., bgs., c.l., works ton.37.00 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
USP, gran., dms ..... lb. .32 - —
Calcium chromate, bgs., frt equald. lb. .29½ - .30
Calcium cyanide, dms., c.l., dlvd E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 2.95 - —
Calcium gluconate, AA, bbls., dms. lb. .74 - .76
USP, bbls., dms ..... lb. .67 - .69
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd E of Rockies cs.22.95 -25.10
100-lb. dms., same basis dm.30.80 -34.50
Calcium hypophosphite, dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
smaller lots, works ..... lb. .41 - .48
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .27¼ - —
Calcium pantothenate, dms., bots., frt. adjusted gram. .045 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate dms lb. .74 - —
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 7.75 - —
bgs., l.c.l., frt. equald 100 lbs. 8.50 - —
Feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 -83.25
bgs., l.c.l., frt. equald ton.89.55 -93.25
19% P, c.l., works, Tex. Cit ton.76.00 - —
21% P, bgs., c.l., t.l., frt. equald ton.94.50 - —
bgs., l.c.l., frt. equald ton.99.50 -104.50
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.20 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt equald 100 lbs.10.50 - —
Calcium phytate, bgs. works lb. .50 - —
Calcium resinate, precip., dms., ton lots, frt. alld., works lb. .33 - —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works ..... lb. .06½ - —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Calcium sulfate (see Gypsum).
Calomel, NF X, powd., dms ..... lb. 5.42 - —
Camphene, 46° m.p., dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½ - —
tanks, same basis ..... lb. .12½ - —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.68 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz., ½-oz. cs ..... lb. .85 - .90
Syn., tech., 1 bbl. or more ..... lb. .48 - —
Syn., USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
bbls., 1,000-lb. lots ..... lb. .60 - —
bbls., smaller lots ..... lb. .61 - —
tablets, ctns., 1,000-lb. lots lb. .85 - —
ctns., 500-lb. lots ..... lb. .86 - —
ctns., smaller lots ..... lb. .87 - —
Camphor oil, sassafrassy, dms ..... lb. .26 - .35
White, dms ..... lb. .29 - —
Cananga oil, native, cns ..... lb. 6.75 - 7.75
Rectified, cns. ..... lb 9.75 - —
Candelilla wax, crude, bgs ..... lb. .63 - .65
Refd., bgs ..... lb. .70 - .72
Powdered Candelilla wax, 20 to 100 mesh, 7c. higher
Cantharides, Chinese, cs ..... lb. 2.00 - 2.05
powd., bxs ..... lb. 2.25 - 2.30
Russian, bgs ..... lb. 4.00 - 4.05
powd., bxs ..... lb. 4.35 - 4.40
Capric acid, dms. ..... lb. .27 - .29
tanks ..... lb. .25 - —
Capryl alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis ..... lb. .19½ - —
tanks, frt. equald ..... lb. .16¼ - —
Sec., 92-99%, dms., c.l. ..... lb. .22 - —
dms., l.c.l. ..... lb. .23 - —
tanks ..... lb. .19½ - —
Caprylic acid, dms. ..... lb. .27 - .29
tanks ..... lb. .25 - —
Capsicum (see Pepper, red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 5.00 - 5.25
NF, from African pepper, dms lb. 4.50 - 5.00
Caraway seed, Dutch, bgs ..... lb. .10½ - .11
Caraway oil, NF, cns. ..... lb. 3.40 - 3.65
Carbazole, 97%, bbls. ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works ..... lb. .074 - —
bgs., l.c.l., works ..... lb. .1225- —
Furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse ..... lb. .10 - —
high abrasion, bulk, c.l., works. lb. .0750- —
bgs., c.l., works ..... lb. .0790- —
bgs., l.c.l., dlvd or whse lb. .122 - .125
high modulus, bgs. c.l., works. lb. .0550- —
ctns., l.c.l., whse ..... lb. .0950- —
semi-reinforcing, bgs., c.l., works. lb. .0450- —
bgs., ctns., l.c.l. whse ..... lb. .0850- —
Pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd or whse. lb. .78 - —
medium color uncompressed, bgs., c.l., works ..... lb. .12 - —
bgs., l.c.l., dlvd or whse lb. .19 - —
Carbon dioxide, indust., wholesale, bulk, dlvd. Metropolitan area ton.73.00 -115.00
cyls., works ..... lb. .08 - .09
Solid, wholesale, works ..... lb. .035 - .040
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
55-gal. dms., l.c.l., same basis lb. .08½ - .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
5-gal. dms., less than 30 dms., same basis lb. .16 - —
tanks, dlvd. ..... lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾ - —
l.c.l. frt. alld ..... lb. .15¼ - —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾ - —
dms., l.c.l., t.t.l. frt. alld lb. .14¼ - —
tanks, frt. alld ..... lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb 4.00 4.25
dms. smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots. ..... lb.43.00 -48.00
Cardamom seed, bleached, "A". lb. 3.10 - —
Bleached, "B" ..... lb. 2.95 - —
Decorticated, Ceylon cs ..... lb 3.00 - —
Guatemalan, cs. ..... lb 2.80 - —
Green, Alleppey, bgs ..... lb 2.15 - —
Ceylon, bgs. ..... lb 2.15 - —
Carmine No. 40, NF bulk, 100-lb lots or more dlvd lb.16.80 - —
bulk, smaller lots, dlvd lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .68 - .69
North country No. 2 crude, bgs., ton lots lb. .78 - .80
refd., pure, ton lots lb. .92 - .94
North country No. 3, Ceara, crude, bgs., ton lots lb. .72 - .73
Ceara refd. pure bgs., ton lots. lb. .82 - .84
Parnahyba crude, bgs. ton lots. lb. .74 - .76
Parnahyba, refd. pure, bgs., ton lots lb. .82 - .84
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.37 - 1.39
Parnahyba bgs. ton lots lb 1.39 - 1.41
Powdered carnauba wax, 20 to 100 mesh, 7c. higher
Carotene, tech, 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .295 —
tech., in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units .21 - —
b-Carotene, in vegetable oil, 400,000 A units per gram cns. gram .084 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. gram .35 - —
Carvol, bots. ..... lb. 7.30 - —
Cascara sagrada bark, bulk ..... lb. .35 - .36
New crop, bulk ..... lb. .31 - .32
Casein, dom. edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
Dom., edible, acid precip., 80 mesh bgs., 10,000-lb. lots or more works lb. .64 - —
Imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb. .24½ - .25¼
New Zealand, duty paid lb. .28 - —
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Batavia, "A," bls. ..... lb. .19½ - —
"B" ..... lb. .18 - —
"C" ..... lb. .17 - —
Korintje "A" ..... lb. .19 - .19¼
"B" ..... lb. .18 - .18½
"C" ..... lb. .17 - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor beans, bgs., f.o.b. Brazil. ton.180.00 Nom.
Castor oil, dom., blown, dms., c.l. lb. .29 - —
dms., l.c.l. ..... lb. .30 - —
dehydrated, bodied, dms., c.l. lb. .3060- —
dms., l.c.l. ..... lb. .3160- —
tanks lb. .2860- —
dehydrated, unbodied, dms., c.l lb. .2910- —
dms., l.c.l. ..... lb. .3010- —
tanks lb. .2900- —
hydrogenated, bgs., tons lots lb. .3375- —
bgs., l.c.l., dlvd. ..... lb. .3575- —
No. 1, dms., c.l. ..... lb. .2550- —
dms., l.c.l. ..... lb. .2650- —
tanks lb. .2350- —
No. 3, tech., dms., c.l. ..... lb. .2475- —
dms., l.c.l. ..... lb. .2575- —
tanks lb. .2275- —
Refd. and deodorized, dms., c.l., ... lb. .3000- —
dms., l.c.l. ..... lb. .3100- —
USP, dms., c.l. ..... lb. .2700- —
dms., l.c.l. ..... lb. .2800- —
tanks lb. .2500- —
Imp., No. 1, Brazilian, tanks lb. .22¾ - —
Castor oil, sulfonated, 50%, dms., works lb. .15¼ - .15½
75%, dms., works lb. .20 - .20½
Castor oil acids, dehydrated, dms. lb. .44¼ - .46¼
split, dms ..... lb. .37¼ - .38¼
Castor oil pomace, bgs., c.l., works. ton.45.50 - —
Castoreum, nat., cns. ..... lb. 5.25 -30.00
Syn., cns. ..... lb 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½ - —
Resub., dms., works lb. 4.29½ - —
Catnip leaves, Southern, bls. lb. .75 - —
Caustic potash (see Potash, caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP, XIII, cns., dms. lb. 3.75 - 4.25
Cedarwood oil, cns., dms ..... lb. .65 - 1.75
Celery seed, French, bgs ..... lb. .28½ - —
Indian, bgs. ..... lb. .27 - —
Celery seed, oil, bots. ..... lb.15.25 - —
Cellulose acetate, flake, powd., bgs., ctns., 100-lb. lots or more, dlvd E lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 - .595
50% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
bgs., smaller lots, same basis. lb. .57 - —
Cerium chloride, 48% dms., dlvd lb. .30 - —
Cerium hydrate, 74% CeO_2 fib. dms., 100-lb. lots or more lb. 1.44 - —
77%CeO_2, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.98
bgs., smaller lots, dlvd ..... lb. 2.03 - 2.23
Cetyl alcohol, extra fib. cns., 500-lb. lots or more lb. .65 .72
NF, fib cns., 140-lb. lots or more lb. .48 —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, bls lb. .85 .98
Roman, cs. ..... lb. 3.00 - —

- Light Color
- Uniformity
- 99.8% Purity
- Basic Production
- Ample Availability



five good reasons to specify

National ADIPIC ACID

for Resins, Plasticizers and Other Monomeric and Polymeric Esters

Basic non-captive production of National Adipic Acid at Hopewell, Va. gave the rubber, plastics, plasticizer, lubricant and chemical industries a major new source. Outstanding product-quality has made National Aniline the preferred supplier of many substantial users.

If you use or contemplate using this versatile dicarboxylic acid, we urge you to get a working sample, price and delivery quotation on National Adipic Acid. You'll find it sets a new industry standard in every important respect.

WRITE ALSO FOR TECHNICAL BULLETIN I-12

This fact-filled, 8-page bulletin on National Adipic Acid gives complete physical and chemical properties, principal reactions of the carboxyl and alpha methylene groups; solubility curve; suggested uses and copious literature references.

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK 6, N. Y.

☐ Send Technical Bulletin I-12 only
☐ Have representative call by appointment

NAME_____

COMPANY_____

ADDRESS_____

_____

National Aniline — Allied Chemical

I-11

Akron Atlanta Boston Charlotte Chattanooga Chicago Columbus, Ga. Greensboro Los Angeles
New Orleans Philadelphia Portland, Ore. Providence Richmond San Francisco Toronto

Chamomile Oil—Clove Leaf Oil

Chamomile oil, blue, Hungarian, bots lb. 225.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots, works. lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone, black).
Charcoal, hardwood, bulk, lump, c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton. 78.00 -80.00
5-lb. paper bgs., c.l., same basis ton. 106.00 - —
10-lb. paper bgs., c.l., same basis ton. 96.00 - —
25 lb. paper bgs., c.l., f.o.b. plant ton. 87.00 - —
40 lb. paper bgs., c.l., same basis ton. 84.00 - —
Pinewood, gran. bgs., c.l., works, South ton. 57.00 - —
bgs., l.c.l., works, South ton. 57.00 -67.00
lump, bgs., c.l., works, South ton. 53.50 —
bgs., l.c.l., works, South ton. 56.50 -71.00
bulk, c.l., works, South ton. 38.00 - —
bulk, t.l., works, South ton. 41.00 - —
Chenopodium oil, NF, ens. lb. 4.75 - 5.00
Chestnut extract, imp., solid, 60% tannin, bgs., ex dock, plus duty lb. .08½- —
powd., 70% tannin, bgs., ex dock, plus duty lb. .0959- —

Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min. dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb. lots lb. 1.03 - —
jars, 100-lb. lots or less lb. 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
Clarif., dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 40%, dms., c.l., frt. alld lb. .16¼- —
dms., l.c.l., 10 dms. or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l. 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works lb. .71 - —

Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
cyls., l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.05 - —
tanks, multiple units, 3 cars, same basis 100 lbs. 6.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - —
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - —
Chloroacetic acid, mono, flake, 99%, dms., c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., min. 10,000 lbs., or over, frt. alld lb. .75 - —
dms., less than 10,000 lbs., same basis lb. .80 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .65 - —
dms., l.c.l., same basis lb. .67 - —
tanks, same basis lb. .63 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area lb. 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
dms., 500 to 1,500 lbs., same basis. lb. 2.00 - —
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works, dlvd. to N. Y. Metropolitan area lb. 1.95 - —

o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E. lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms. lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., bots. lb. 1.50 - —
Coml., cyls. 180 lbs., frt. alld lb. .95 - —
cyls., 100 lbs., same basis lb. .97 - —
cyls., 25 lbs., same basis lb. 1.22 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Choline chloride, fib. dms., frt. adjusted lb. 1.25 - 1.35
Choline dihydrogen citrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chrome green, CP, dark, light, medium, blue content 1 to 15%, bbls., N of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43
blue content 45-49%, bbls., same basis lb. .44 - .46
Reduced color, 25% lb. .19 - .20

Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.). Miss., N C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Jospeh; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

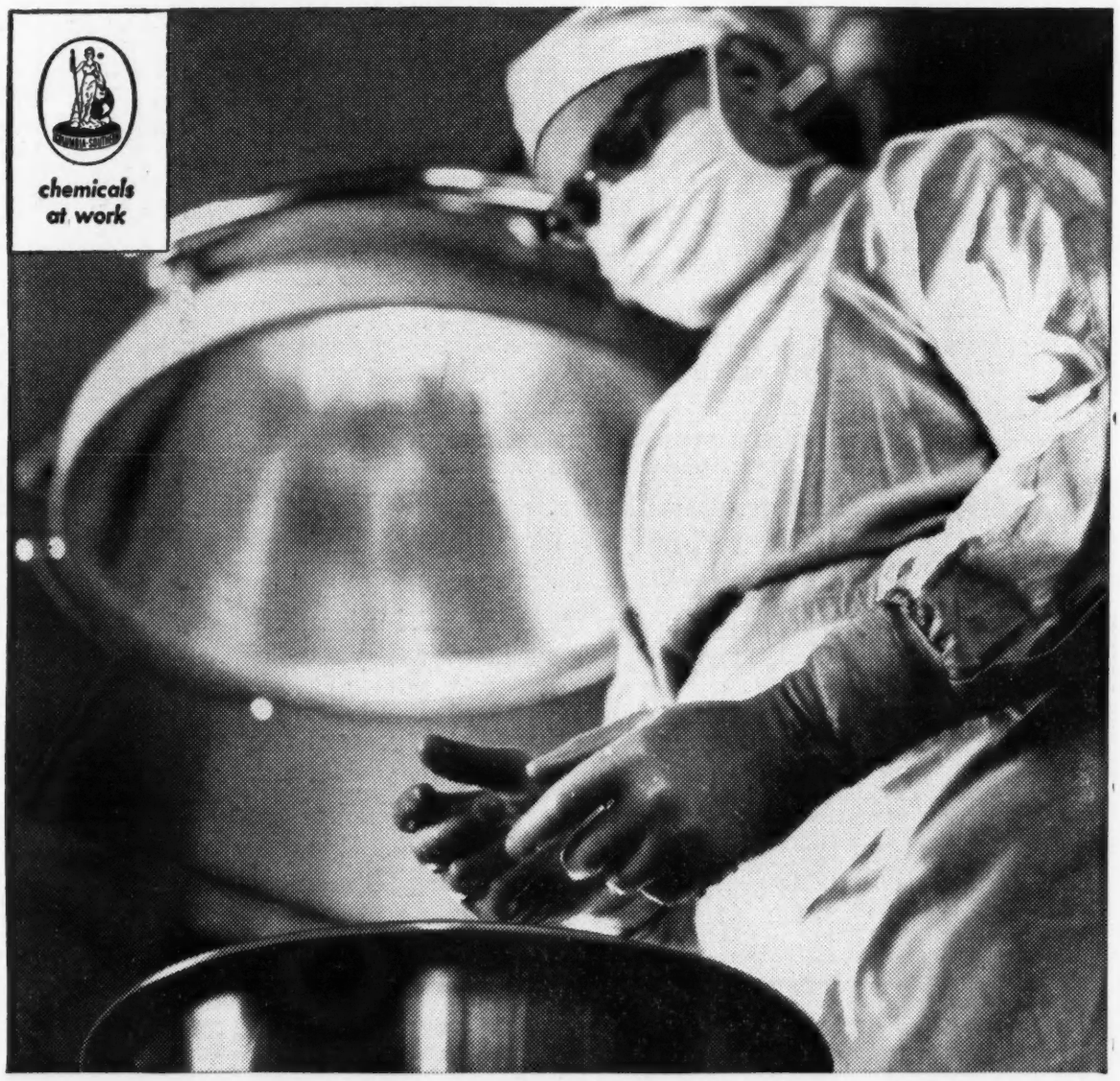
Chrome orange, CP, bbls., dlvd. N. of Tennessee and N. C., E. of Miss. R., include Davenport, Tenn. and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —

Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport 1½c.). Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chrome yellow, CP bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .35 - —

Chrome yellow price are ½c. higher dlvd. Ala., Fla., Ga., La., (Shreveport 1½c. higher); Miss., N. C., S. C., Tenn.; Dallas, Tex., 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Chromic acid, 99¾% dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd New York Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l. frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44¾- —
bgs., l.c.l., same basis lb. .45½- —
Chromium trioxide, NF bots lb. 1.15 - —
Cinchona bark, NF red, broken, bgs. lb. .35 - .40
NF, yellow, broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots lb. 2.15 - 2.75
Cinnamic aldehyde, dms lb. .95 - 1.25
Cinnamon, Ceylon, No. 2, bgs. lb. 1.15 - —
Ceylon, "0000," bgs., afloat lb. 1.25 - —
Cinnamon bark oil, bots lb. 36.00 -70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), ens. dms lb. 10.25 -10.90
Citral, bots., ens. lb. 5.00 - 5.65
Citric acid, USP, anhyd., fine gran., bgs. dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30⅛
bgs., dms., smaller lots lb. .30½- .31
hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28⅛
bgs., dms., smaller lots lb. .29 - .29⅛
Powdered citric acid ½c. higher.
Citronella oil, Ceylon, ens., dms lb. .80 - 1.25
Java, ens. lb. 1.25 - —
Java-type, ens lb. .95 - 1.10
Citronellal, bots., dms. lb. 3.00 - 3.50
Citronellol, bots., dms. lb. 4.30 - 5.35
Civet, artif., bots lb. 13.75 -15.00
Nat., bots. oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton. 10.00 - —
purif., bgs., c.l., Tenn ton. 20.50 - —
Imp., airfloated, bgs., c.l., Atl. port long-ton. 42.00 -45.00
lump, bulk, Atl. port long-ton. 27.00 -30.20
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 10.00 - —
Georgia, bgs., l.c.l., works. ton. 15.50 - —
300 mesh, bgs., c.l., Georgia, works ton. 13.50 -14.50
bgs., l.c.l., same basis ton. 35.00 -36.00
Imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long ton. 20.00 -35.00
powd., bgs., c.l., ex dock net ton. 50.00 —
bgs., l.c.l., ex whse net ton. 60.00 -65.00
Cleve's acid, mixed, bbls. lb. 1.05 - —
Clove, Madagascar, bgs. lb. .46 - —
Zanzibar, bgs. lb. .49 - —
Clove bud oil, USP, ens., dms. lb. 2.90 - 3.00
Clove leaf oil, crude, dms. lb. 1.05 - 1.20



Hospitals today are exceedingly sterile conscious. Chlorine continues to play a big role in modern sanitation.

12% of the mothers died before chlorine came along!

In the mid 19th century, before anyone knew much about germs and infection, deaths from "childbed fever" were notoriously high.

Ignaz Philipp Semmelweis, a Vienna doctor, was among the first to recognize this as a blood poisoning caused by lack of sanitation. He arrived at his conclusion when one of his colleagues accidentally cut himself with a scalpel while performing an autopsy, and died shortly after. Semmelweis alone recognized the supreme importance of the event: here was a *man* who had succumbed to childbed fever!

To test his theory, Semmelweis ordered stringent disinfection procedures in the maternity clinic under his supervision. The mortality rate dropped dramatically . . . from 12% to 3% in less than a year. In the ensuing year, it was further reduced to about 1%.

An important feature of this sanitation was that he prescribed the use of chlorine water for disinfecting hands and instruments. While other disinfectants have been developed since, sanitation continues to remain one of the chief uses of chlorine . . . not only in hospitals but in schools, public institutions, water supply systems, on the farm and in the home.

Major industrial users of this indispensable element include producers of organic chemicals, textiles, pulp and paper, bleaches, rayon, plastics and many other goods. A leading merchant producer of chlorine, Columbia-Southern also supplies caustic soda, soda ash and related chemicals.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER • PITTSBURGH 22 • PENNSYLVANIA
CHLORINE, ALKALIES, AND RELATED CHEMICALS
OFFICES IN PRINCIPAL CITIES
IN CANADA: Standard Chemical Limited and its Commercial Chemicals Division

CMC, crude, 96%, low or medium vis., bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .41½- .43
65%, low or medium vis., bgs. or fib. dms., c.l., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .41½- .43
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs, works, frt. alld lb. .55 - —
bgs., smaller lots, same basis. lb. .57 - —
CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.

Coaltar, crude, resale for soins., dms., c.l., ex whse gal. .30½- —
dms., l.c.l., ex whse ... gal. .33½- —
tanks, works ..... gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .30½- .35
dms., l.c.l., ex whse gal. .33½- .39
tanks, works gal. .16½- .20½
Coaltar pitch, aluminum, bulk, works ton.40.00 -42.00
Carbon and indust., bulk, works. ton.40.00 - —
Core, bulk, works ..... ton.36.50 - —
Fiber, bulk, works ..... ton.44.00 - —
Roofing, 140-155°F., Federal Specification RP-381, Type I, tanks, works ton.39.00 - —
Cobalt acetate, 23.7% Co dms., dlvd. lb. 1.10 - —
Cobalt blue, genuine, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss R., including St. Paul, Minneapolis, Davenport, Rock Island, St Louis lb. 4.90 - —

Cobalt blue dlvd prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt equald with Chicago.

Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co, powd., bgs., dlvd lb. 1.57 - —
Cobalt chloride, 24.2% Co, dms., dlvd lb. 1.05 - —
Cobalt hydrate, 60-61% Co, dms., dlvd lb. 2.20 - —
Cobalt linoleate, fused 8½% Co, dms lb. .68 - —
Liq., 6% Co, dms ..... lb. .54¾- —
Cobalt metal, 97-99%, kgs., ex whse. lb. 2.00 - —
Cobalt naphthenate liq., 6% Co, dms., dlvd lb. .46½- —
Cobalt nitrate, 20.1% Co, bbls., dlvd. lb. .85 - —
Cobalt oxide, black, 72½-73½% Co, kgs lb. 1.52 - —
70-71% Co, kgs ..... lb. 1.48 - —
Cobalt phosphate, powd., 32.1% Co, kgs., dlvd lb. 1.43 - —
Cobalt resinate, fused, 3% Co, dms. lb. .28 - —
Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —
Monohydrated, 33% Co, dms., dlvd lb. 1.17 - —
Cobalt tallate, 6% Co, dms., dlvd lb .42 - —
Cocaine, USP, cns., 100-oz lots oz.17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz.13.75 - —
Cocillana bark, bls ..... lb. .25 - —
Cocoa butter, bgs. ..... lb. .76 - .80
Coconut oil, crude, tanks, New York lb. .12⅝- —
tanks, Pac coast ..... lb. .12 - —
Refd., Cochin type, dms., tax incl lb. .19 - .19½
deodorized, dms., tax incl lb. .21 - .22
Coconut oil acids, dist., dms. ... lb. .23½- .25½
tanks ..... lb. .21½- —
Dbl. dist., dms. ..... lb. .24½- .26½
tanks ..... lb. .22½- —
Cod oil, Newfoundland, dms ... lb. .11⅜- .11½
Codeine, NF cns., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms ..... gal. 1.50 - 1.55
Cohosh root, black, bls. ..... lb. .20 - .22
Blue, bls. ..... lb. .20 - .22
Colchicine, USP, bots., cns. ... oz.29.00 -35.50
Colchicum root, bls. ..... lb. .35 - —
Colchicum seed, bgs. ..... lb. .60 - —
Collodion, USP, dms. ..... lb. .32½- —
Flexible, dms. ..... lb. .34 - —
Colocynth, pulp, bls. ..... lb. .55 - —
Colombo root, bls ..... lb. .15 - .16
Condurango bark, bls ..... lb. .26 - —
Congo copal gum No. 1, bgs ... lb. .24 - .26
No. 2, bgs. ..... lb. .19½- .21
No. 3, bgs. ..... lb. .15¾- .17
Copaiba balsam, cns., dms ..... lb. .60 - .70
Copaiba oil, cns. ..... lb. 1.75 - 2.50
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works ..... lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3235- —
bgs., l.c.l., works ..... lb. .3385- —
Copper Chloride, cupric, anhyd., dms., works lb. .42 - .42½
Cryst., dihydrate, dms., works. lb. .28¼- .28¾
Cryst., dried, dms., works ..... lb. .36½- .37
Copper chloride, cuprous, dms., works lb. .4068- .4468
Copper cyanide, tech, dms., 20,000-lb lots or more lb. .698 —
dms., 1,000-lb. lots or more lb. .708 —
dms., smaller lots lb. .728 .748
Copper gluconate, dms lb. 3.15 - 3.35
Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .49¼- —
dms., l.c.l., same basis ..... lb. .49¾- —
Copper metal, electrolytic, dlvd. Valley basis lb. .28½- —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —
Copper nitrate, tech., cryst., dms., works lb. .29¼- .31¼
Copper oleate, solid, 9% Cu, dms., works lb. 45 —
Copper oxide, black, bbls., 100-1,999-lb. lots, works lb. .47 - —
Copper oxide, red 97% USN Type I, bbls., 100-5,000-lb. lots. lb. .48¼- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .46¼- —
Copper oxychloride, dms., c.l., works lb. .52 - —
dms., l.c.l., works ..... lb. .53½- .63½
Copper quinolinolate, fib dms. lb. 4.25 4.50
Copper resinate, precip., dms., frt. alld lb. .34 —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs. .1195- —
bgs., l.c.l., same basis ... 100 lbs.12.45 -14.95

Copper sulfate, monohydrated, 35%, dms., c.l., works ..... 100 lbs.21.50 - —
dms., l.c.l., works ..... lb.22.25 - —
Tribasic, distributors, bgs., c.l., same basis .. 100 lbs.26.20 - —
bgs., l.c.l., same basis .. 100 lbs.27.20 -30.20
Copper undecylenate, dms ..... lb. 2.75 - —
Copra, Atl., Gulf ports, c.i.f. .. ton.167.50 - —
Pac. ports, c.i.f. ..... ton.162.50 - —
Coriander oil, USP, bots ..... ton.13.50 - —
Coriander seed, Moroccan, bgs .. lb. .10 - —
Rumanian, bgs. ..... lb. .08¾- —
Yugoslavian, bgs. ..... lb. .08½- —
Corn oil, crude, tanks, works. ... lb. .13 - —
Foots (soapstock) acid 95%, tanks, New York .. lb. .06¾- —
Refd., salad, dms. ..... lb. .1866- .1900
tanks ..... lb. .1666- —
Corn oil acids, dist., dms ..... lb. .17¾- .20¼
tanks ..... lb. .15¼- —
Corn starch (see Starch, corn).
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.32 - —
paper bgs., l.c.l. ..... 100 lbs. 7.57 - —
Corn syrup, 42°, non-ret. dms., c.l., 100 lbs. 7.30 - —
non-ret. dms., l.c.l. ... 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bulk gram. 3.50 - 3.55
Costus oil, bots. ..... oz. 6.00 - —
Cottonseed meal, 41% bgs., Memphis .. ton.55.00 - —
Cottonseed oil, crude, tanks, South, East .. lb. .13½- —
Foots (soapstock) acid, 95%, tanks, New York .. lb. .05¾- —
tanks, Valley ..... lb. .13 - —
tanks, Texas, Lubbock ..... lb. .12⅝- —
tanks, Texas, Waco ..... lb. .12⅞- —
Refd., salad, dms. ..... lb. .18½- .19
tanks ..... lb. .16½- —

Cottonseed oil acids, dist., dms .. lb. .16¾- .19¼
tanks ..... lb. .14¼- —
Cottonseed pitch, raw, dms., works. lb. .03 - .03¼
tanks, same basis ..... lb. .02¾- —
Coumarin, NF, cryst., dms. .... lb. 3.70 - 3.90
Cramp bark, NF, bls ..... lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
crude, soln. 80%, tanks, works. gal. .226 - —
refd., dms., c.l., works ..... gal. .42 - .44
dms. l.c.l. same basis ..... gal. .53 - .55
tanks same basis ..... gal. .33 - .35
Creosote oil (see Creosote coaltar).
Creosote, wood, beechwood, cbys., dms lb. 1.60 - 1.65
Hardwood, NF, bots., cbys ... lb. 1.30 - —
Pinewood, dms., incl., c.l., works. lb. .0561- —
dms. incl., l.c.l., works ..... lb. .0634- —
dms. incl., l.c.l., ex whse, New York .. lb. .0745- —
tanks, works ..... lb. .0460- —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works ..... lb. .72 - —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald .. lb. .1625- —
non-ret. dms., l.c.l., same basis .. lb. .1675- —
tanks, same basis ..... lb. .145 - —

Cresol, USP, non-ret. dms., c.l., same basis lb. .1775- —
non-ret. dms., l.c.l., same basis lb. .1825- —
tanks, same basis ..... lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
dms., l.c.l., works ..... lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .1775- —
dms., l.c.l., same basis ..... lb. .1825- —
tanks, same basis ..... lb. .16 - —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald lb. .2175- —
dms., l.c.l., same basis ..... lb. .2225- —
tanks, same basis ..... lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald .. lb. .16¾- —
ret. dms., l.c.l., same basis lb. .17¼- —
tanks, same basis ..... lb. .15 - —
30°-30.49°C., m.p., dms., c.l., frt. equald lb. .16¼- —
ret. dms., l.c.l., same basis lb. .16¾- —
tanks, same basis ..... lb. .14½- —
o-Cresol, m.p., 29°-29.9° C., dms., c.l., frt. equald lb. .15¾- —
ret. dms., l.c.l., same basis lb. .16¼- —
tanks, same basis ..... lb. .14 - —
m.p., 25° 28.9°C., dms., c.l., frt. equald lb. .14¾- —
ret. dms., l.c.l., same basis lb. .15¼- —
tanks, same basis ..... lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd .... lb. .52 - —
dms., l.c.l., dlvd ..... lb. .53 - —
tanks, dlvd. ..... lb .49 - —
p-Cresyl methyl ether, cns ..... lb. 1.80 - 2.05

One of many reasons why Armour continues:

Leader in progressive fatty acid chemistry

EVERYBODY BENEFITS WHEN A STANDARD IS RAISED

Through the years, Armour has led in the development of many important new concepts in fatty acid chemistry. Your need for highest purity, stability and uniformity of fatty acids has kept us alert for better methods of controlling quality.

This is a search that never ends . . . a challenge that keeps us on our toes in today's competitive market. *As a result, many of Armour's test standards for fatty acids are followed by the entire industry.*

Such leadership is another good reason why Armour is your one best source for *all* fatty acids.

ARMOUR NEO-FATS®—STANDARDS FOR THE INDUSTRY

SPECIALTY COCO ACIDS

Neo-Fat 8 ..... 94% Pure Caprylic
10 ..... 94% Pure Capric
12 ..... 96% Pure Lauric
14 ..... 94% Pure Myristic
255 ..... Stripped Coco
265 ..... Double Distilled Coco

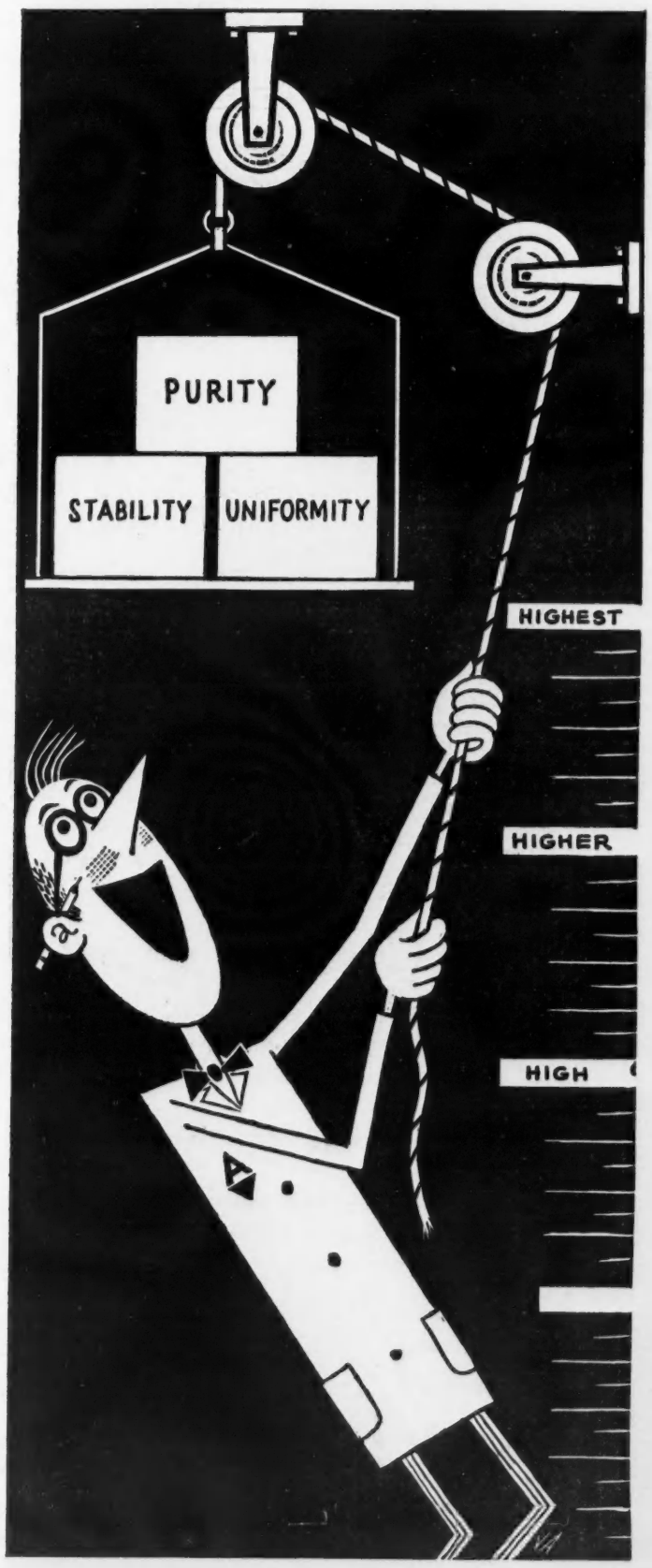
SPECIALTY PALMITIC AND STEARIC ACIDS

Neo-Fat 16 ..... 95% Pure Palmitic
16-54 .. 68/30% Palmitic-Stearic
18 ..... 93% Pure Stearic
18-S ... 95% Special Pure Stearic
18-61 .. 78/21% Stearic-Palmitic

For specifications on these and other Fatty Acids, request Armour's Specification and Color-Comparison Slide Rule.

ARMOUR CHEMICAL DIVISION

© Armour and Company • 1355 W. 31st Street • Chicago 9, Ill.



Cresylic Acid—Dibutyl Fumarate

Cresylic acid, coaltar, dom., 50%, 207° C. or above, resin and tricresyl phosphate grade, tanks, frt. equald. gal. 1.10 - —
50%, 204° to 207° C., resin grade, tanks, frt. equald. gal. 1.20 - —
50%, 204° to 207° C., tricresyl phosphate grade, tanks, frt. equald gal. 1.10 - —
50%, 210° or above, non-resin grade, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 - —
dms., t.c.l., frt. equald gal. 1.19 - 1.20
tanks, frt. equald gal. 1.00 - —
Imp., 75% at 215° C. or over, dms., ex whse gal. .95 - —
Cresylic acid, petroleum, dom., 195° to 214° C., non-ret. dms., 55 to c.l., works, San Francisco and Los Angeles gal. .80 - —
non-ret. dms., t.c.l., same basis gal. .82 - .84
tanks, same basis gal. .65 - —
200° C. to 232° C., tanks, Wilmington, Cal gal. .65 - .72
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —
non-ret. dms., t.c.l., same basis gal. .78 - .80
tanks, same basis gal. .61 - —

Cresylic acid, petroleum, dom., 220° C. to 242° C., tanks, Wilmington, Cal gal. .62 - .67
245° to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonaldehyde, 91-93%, dms., t.c.l., works lb. .24¼ - .25
Crotonic acid, fib. dms., 200 lbs. or more, works lb. .50 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., t.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 - —
Cubeb berries, XX, NF, bgs lb. .70 - —
Powd., cs lb. .85 - —
Cubeb oil, cns. lb 4.10 - 4.25
Cumene, dms., c.l., works lb. .12 - —
dms., t.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .23 - .24
Moroccan, bgs. lb. .29½ - —
Turkish, bgs lb. No prices.
Cumin oil, bots., cns lb. 4.75 - 5.00
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .07¼ - —
Cyanamide, fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract ton. 55.00 - —
pulv., 21% N, bgs., works, unit-ton. 2.75 - —
Indust. grade, bgs., c.l., works ton. 75.00 - —
bgs., t.c.l., works ton. 96.00 - —
6-16 mesh, dms., c.l., works ton. 120.00 - —
dms., t.c.l., works ton. 140.00 - —

Cyanoacetic acid, tech., bbls. lb. .90 - 1.25
Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
dms., t.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .26½ - —
dms., t.c.l., works, same basis lb. .27½ - —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb. .32½ - —
dms., t.c.l., works lb. .35 - —
tanks, works lb. .29 - —
Cyclohexene, min. 98% b.r., 82.5° C. 85° C., 360-lb. dms., c.l., works lb. .55 - —
360-lb. dms., t.c.l., same basis. lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., t.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl. 48.00 - —
6-oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots. gal. .38 - —
cyls 100-gal. lots. gal. .37 - —
cyls., 200-gal. lots gal. .36 - —
Cypress oil, bots lb. 5.30 - —

D

2,4-D tech., bags., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., t.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works lb. .43 - —
dms., t.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —

2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., t.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia, A/E, cs lb. No stocks.
dust, bgs lb. No stocks.
E, bgs lb. No stocks.
East India, batu, bold, bgs. lb. .13¾ - .15
nubs and chips, bgs. lb. .08¼ .09¼
black, bold, bgs. lb. .14½ - .16½
unscraped, bgs. lb. .12 - .13½
nubs and chips, bgs. lb. .11½ - .13
pale, chips, bgs. lb. .13 - .15
nubs, bgs. lb. .17¾ - .20
Siam, cs lb. .36½ - .40
Singapore, No. 1, bgs. lb. .43 - .47
No. 2 bgs lb. .32 .34
No. 3, bgs. lb. No stocks
dust, bgs. lb. .17 - .19
seeds, bgs. lb. No stocks.
Dandelion root, bls. lb .32 —
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - —
fib dms., t.c.l., works lb .46 - —
DDT, flake or lump, bgs., c.l., works, frt. equald lb. .20 - —
bgs., smaller lots, same basis lb. .22 - —
fib. dms., c.l., same basis lb. .21 - —
fib. dms., smaller lots, same basis lb. .23 - —
Powdered DDT ¾c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
dms., t.c.l., dlvd. lb. .43 - —
tanks, dlvd. lb. 38½ - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½ - —
dms., t.c.l., dlvd lb. .24½ - —
tanks, dlvd. lb. .21 - —
Perfume grade, bots lb. 1.75 - 2.00
Decyl alcohol, normal (see 1-Decanol).
Deertongue leaves, bls. lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bags., c.l., t.l., works ton. 49.50 - —
Feed grade, 17% P, paper bgs., c.l., t.l., works ton. 58.00 - —
18% P, paper bgs., c.l. t.l., works ton. 64.10 - —
19% P, paper bags, works, Houston, Tex., c.l. and t.l. per ton. 69.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common, bbls. lb. .10 .12
Neutral, bbls. lb. .21 23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms, c.l., dlvd. E of Rockies gal. .64½ .66
dms., t.c.l., same basis gal. .66½ .77
tanks, dlvd., same basis gal. .48½ .50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., t.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .65½ - —
dms., t.c.l., same basis gal. .70½ - .76½
tanks, same basis gal. .49½ - —
SD2B, dms., c.l., dlvd. E of Rockies gal. .64 - —
dms., t.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .63 - —
dms., t.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .655 - —
dms., t.c.l., same basis gal. .705 - .765
tanks, same basis gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., t.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
dms., t.c.l., same basis gal. .695 - .795
tanks, same basis gal. .485 - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .63 - —
dms., t.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., t.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .64 - —
dms., t.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —
For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, bots lb. 24.00 - 25.00
dl-Desoxyephedrine hydrochloride, bots lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.33 - —
paper bgs., t.c.l. 100 lbs. 9.48 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.17 - —
paper bgs., t.c.l. 100 lbs. 9.32 - —
light, paper bgs., c.l. 100 lbs. 9.07 - —
paper bgs., t.c.l. 100 lbs. 9.22 - —
white, paper bgs., c.l. 100 lbs. 8.91 - —
paper bgs., t.c.l. 100 lbs. 9.06 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Dextrin, potato, imp., bgs. lb. .10½ - .11
Dextrose, USP, dms. lb. .17¾ - —
Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15½ - —
dms., t.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .13 - —
Tech., dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .12½ - —
Diacetyl, flavor grade, bots. lb. 4.55 - 5.20
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., t.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms. t.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
o-Dianisidine, fib., dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾ .90
dms., t.c.l., same basis lb. .90¼ .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
Dibutyl fumarate, dms., c.l. t.l., frt. alld lb. .33 - —
dms., t.c.l., t.t.l., frt. alld lb. .34 - —
tanks, frt. alld lb. 30½ - —

You get *prompt container delivery* from

There are seven centrally located U.S. Steel container factories across the country. Each one is completely integrated to give "next-door" service to every shipper in the area. Why not make your shipping plans around this prompt, sure U.S. Steel service.

Profit from all 5 of these U.S. Steel extras, too:

- **Best rust protection** — there's more zinc phosphate on every USS rust-inhibited container.
- **Widest container variety** — from 2½-gal. pails to 55-gal. drums, including stainless.
- **Eye-catching containers** — your containers not only ship your product, but advertise it, too — when color-decorated by U.S. Steel.
- **Job-tailored fittings** — a wide selection of fittings to choose from, others available to order.
- **Longer container life**—extra zinc phosphate gives your containers a safer, longer life.

UNITED STATES STEEL PRODUCTS
DIVISION
UNITED STATES STEEL CORPORATION
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
Los Angeles and Alameda, Calif. • Port Arthur, Texas
Chicago, Ill. • New Orleans, La. • Sharon, Pa. • Camden, N. J.

USS STEEL DRUMS

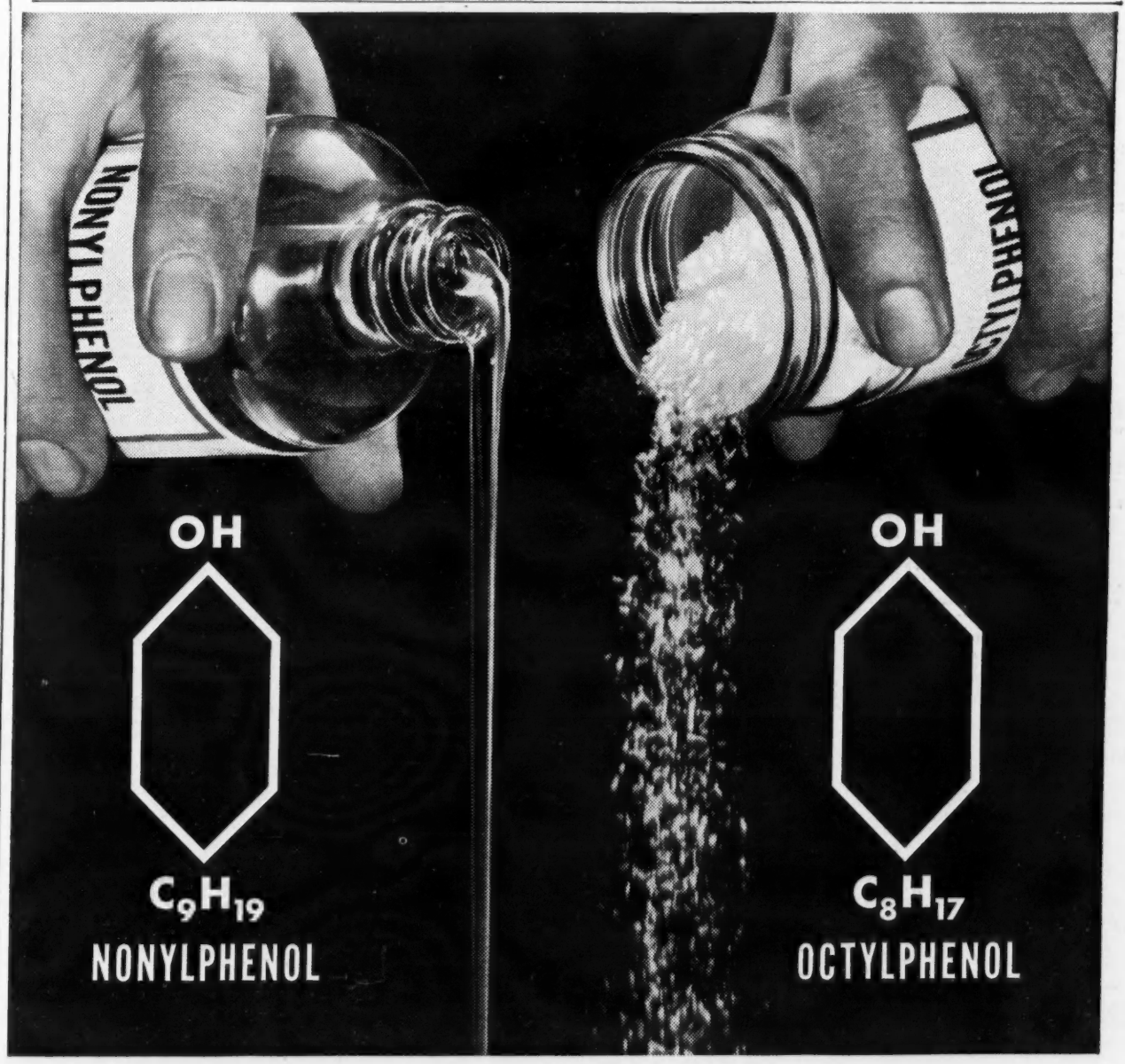
UNITED STATES STEEL

Dibutyl maleate, dms, c.l., t.l., frt. alld lb. .33 - —
dms., l.c.l., t.t.l., dms., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½- —
Dibutyl phthalate, dms., c.l., dlvd. E. lb. .32½- —
dms., l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 - —
Dibutyl sebacate, dms., c.l., works lb. .66 - —
dms., l.c.l., works lb. .66½- .67
tanks, works lb. .64 - .64½
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .56½- —
tanks same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd lb. 1.20 - —
dms., t.t.l., dlvd. lb. 1.24 - —
Tech., dms., c.l., dlvd lb. .91 - —
dms., l.c.l., dlvd lb. .95 - —
tanks, dlvd. lb. .86 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .31 - .32
dms., l.c.l., dlvd. lb. .32 - .33
tanks, dlvd lb. .27½- —
Dicapyrl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Dichlorophenoxyacetic acid (see 2,4-D)
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼- —
dms., l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., f.o.b., works lb. .12 - .14½
dms., l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
2,2-dichloroethyl ether, c.l., t.l., dlvd. E lb. .15½- —
l.c.l., l.t.l., same basis lb. .16½- —
tanks, same basis lb. .13 - —
Dichloropentanes dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works. lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
fib. dms., l.c.l., same basis lb. .59¼- .60
Didecyl phthalate, dms., c.l., works. lb. .34 - —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31½- —
Dieldrin, dms., frt. alld lb. 1.80 - —
dms., l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms. c.l., dlvd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
dms., l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd lb. .70½- —
tanks, dlvd lb. .67 - —
Diethyl oxalate, dms., c.l., frt. alld. lb. .42 - —
dms., l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Diethyl phthalate dms., c.l., dlvd. lb. .30 - .30½
dms., l.c.l., dlvd. lb. .31 - .31½
tanks, dlvd lb. .27½- .28
Diethyl sulfate, dms., c.l., works lb. .19 - —
dms., l.c.l., works lb. .19¾- —
tanks, works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E lb. .17¾- —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, dms., c.l., dlvd E lb. .30¾- —
dms., l.c.l., dlvd. E lb. .31¾- —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works, lb. .30¼- —
dms., l.c.l., works lb. .31 - —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½- —
dms., l.c.l., dlvd lb. .23½- —
tanks, dlvd lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works, lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, dlvd. E lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb. .20½- —
dms., l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l., dlvd. E lb. .45 - —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP bots., 10-kilo lots kilo 100.00 -147.50
bots., 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms lb. 1.20 - —
Digitoxin, USP, bots gram. 4.35 - 4.75
Diglycol laurate, dms lb. .32¾- .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycolic acid, bgs., works lb. .14 - —
Dihexyl sebacate, dms., c.l., works. lb. .64 - —
dms., l.c.l., works lb. .64½- .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0850- .0875
Dihydrostreptomycin sulfate, bulk, gram. .0850- .0875
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —

Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .31 - —
dms., l.c.l., same basis lb. .32 - —
tanks, same basis lb. .28½- —
Di-iso-octyl sebacate, dms., c.l., works lb. .63½- —
dms., l.c.l., works lb. .64½- —
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¼- —
tanks, same basis lb. .20¾- —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs., afloat, lb. .15 - .16
Nat., bgs lb. .08 - —
Dillseed oil, bots lb 2.80 4.25
Dillweed oil, dom., bots., dms lb. 3.25 4.25
Dimethyl anthranilate, cns. lb. 5.10 - 5.80
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd lb. 1.225 - —
dms., l.c.l., dlvd lb. 1.235 - —
tanks, dlvd lb. 1.20 - —
70%, dms., c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms lb. 2.20 2.25
Dimethyl phthalate, dms., c.l., works lb. .31 - —
dms., l.c.l., works lb. .32 - —
tanks, works lb. .28½- —
Dimethyl sebacate, dms., c.l., works. lb 1.275 - —
dms., l.c.l., dlvd lb. 1.285 - —
tanks, works lb. 1.25 - —

Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —
Dimethyl sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
55-gal. ret. dms., l.c.l., works lb. .16 - —
10-gal. ret. dms., l.c.l., works lb. .16½- —
Dimethylamine, 25% soln. dms., c.l., frt. equald lb. .42 - —
dms., l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
Dimethylamine, 40% soln., dms., c.l., frt. equald lb. .39 - —
dms., l.c.l., frt equald lb .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .32 - —
dms., l.c.l., frt. alld. lb. .33 - —
tanks, frt. alld lb. .30 - —
N,N-Dimethylformamide, dms., works lb. .34 - .39
tanks, works lb. .32 - —
2,4-Dinitroaniline dms. 1,000-lb. lots, frt. equald lb. .68 - —
dms., smaller lots, frt equald lb. .71 - —
Dinitroaniline orange toner, CP bbls., dlvd N. of Tenn. and N. C., E. of Miss R., including Davenport, and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. 1.50 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89° C., dms lb. .24 - —

2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt., alld E lb. .15¼- —
dms., l.c.l. frt. alld. E lb. .15¾- —
tanks, frt. alld E lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C. dms., c.l., frt. alld. E lb. .20¼- —
dms., l.c.l. frt. alld E lb. .20¾- —
tanks, frt alld. E lb. .20 - —
2,4-Dinitrophenol, bbls lb. .37 - —
2,4-Dinitrotoluene, oily dms lb. .11 - —
Refd. 63°C., dms lb. .23 - —
Dioctyl adipate dms. c.l., works. lb. .42½- —
dms., l.c.l works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate dms., c.l., frt. alld lb. .30½- .31
dms., l.c.l., frt alld lb. .31½- .32
tanks, frt. alld lb. .28 - .28½
Dioctyl sebacate dms. c.l., works. lb. .60½- —
dms., l.c.l., works lb. .61½- .62½
tanks, works, dlvd lb. .58 - .58½
1,4-Dioxane, dms., c.l. works lb. .28¾- —
dms., l.c.l., works lb. .29¼- —
tanks, works lb. .27 - —
Dipentaerythritol, bgs. l.c.l., works, lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .47 - —
dms., l.c.l. works gal. .52 - —
dms., l.c.l. ex whse gal. .62 - —



LOW-COST ROHM & HAAS ALKYLPHENOLS

versatile intermediates available in drums and tankcars

Low-cost octylphenol and nonylphenol are high purity intermediates that may provide new ways for you to improve products and properties. They can be nitrated, halogenated, sulfonated, esterified, ethoxylated, and used in many other reactions.

Small quantities of alkylphenols added to other phenols in resin formation impart oil solubility, water resistance and good electrical properties to the resulting resins. Excellent lubricating oil additives are obtained from calcium or barium salts of alkylphenol derivatives. Good surface-active qualities are common to ethoxylation products. Stabilization against ultraviolet light deterioration results when octylphenol is added to ethyl cellulose. Other alkylphenol product ideas await you in the preparation of rubber chemicals, fungicides, dyestuffs, bactericides, pharmaceutical compounds and insecticides. Write to Dept. SP for our 12-page booklet describing many alkylphenol reactions.

Chemicals for Industry

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

Dipentene steam- dist., dms., c.l., works, south gal. .59 - —
dms., c.l., dlvd. New York gal. .67 - —
tanks, works, south gal. .45 - —
Dip oil (see Fur acid oil)
Diphenyl, bbls. c.l. works lb. .15 - —
bbls., l.c.l. works lb. .16 - —
Diphenyl in bags ¼c lower.
Diphenyl oxide perfume grade cns. lb. .65 - .85
Diphenyl phthalate dms. c.l. works. lb. .51¾ —
dms., l.c.l., works lb. .53¾ —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .33 - —
bgs., l.c.l., same basis lb. .35 - —
Refd., fused, tanks, same basis lb .31 - —
Tech., fused, tanks, same basis lb. .30 - —
Diphenylguanidine bgs. dms., ton lots, frt alld lb. .52 - —
bgs., smaller lots, frt. alld lb. .53 - —
Diphenylhydantoin-sodium USP. dms lb 5.00 - 5.60
Dipropylene glycol dms. c.l., frt. alld lb. .17¾ —
dms., l.c.l., frt. alld lb. .18¾ —
tanks, frt. alld. lb. 15¼ —
Dipropylene glycol methyl ether, dms., c.l. dlvd E lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ —
Dithiodibenzoic acid dms. 1,000-lb. lots, works lb 1.45 - —
Di-o-tolylguanidine dms., ton lots, frt. alld lb. .62 - —
dms., smaller lots frt. alld lb. .63 - —
Divi-divi, 45% tannin, bgs. bls. c.l. US ports ex dock ton.76.00 Nom.
Divinylbenzene, 20-25% dms., c.l., works, frt equald lb. .20 - —
dms., l.c.l. same basis lb. .21 - —
tanks, same basis lb. .19 - —
Divinylbenzene, 50-60%, dms., c.l., works, 100% basis lb 1.00 - —
dms. l.c.l. works 100% basis.lb. 1.05 - —
Dodecylbenzene dms. c.l., frt. alld lb. .14½ —
dms. l.c.l., same basis lb. .15½ —
tanks, same basis lb. .12½ —
Dyes coaltar certified colors for food, drugs and cosmetics, 500-lb and 1-lb lots, dlvd:—
Blue, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb 15.65 -17.60
Green FD&C No. 1 lb.15.65 -17.60
No. 2 lb.19.60 -22.85
No. 3 lb.21.30 -35.90
Red, FD&C No. 1, cns lb 5.90 - 7.85
No. 2 lb 3.30 - 4.10
No. 3 lb 19.60 -22.85
No. 4 lb 5.55 - 7.50
Violet, FD&C, No. 1, cns lb.15.65 -17.60
Yellow FD&C No. 1 cns lb 9.15 -11.05
No. 5 lb 3.30 4.10
No. 6 lb 3.30 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb.10.50 -10.95
Brown D&C No. 1 lb.15.65 -16.10
Green D&C No. 5 lb 15.65 -16.10
No. 6 lb 15.65 -16.10
No. 7 lb.14.35 -14.80
Orange, D&C, No. 3 lb.10.50 -10.95
No. 4 lb.19.60 -20.05
No. 5 lb 5.25 5.70
Red, D&C, No. 17 lb.10.50 -10.95
No. 18 lb 23.55 -24.00
No. 19 lb 15.00 -15.45
No. 21 lb 3.10 3.60
No. 22 lb.10.50 10.95
No. 28 lb.24.20 -24.65
No 33 lb.17 00 -17 45
Violet D&C, No. 2 lb.15.65 16.10
Yellow D&C No. 7 lb.10.50 -10.95
No. 8 lb.10.50 -10.95
No. 10 lb.13.05 -13.50
No. 11 lb.13.05 -13.50
Dyes, coaltar certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd: —
Blue, Ext. D&C, No. 1, cns lb.15.65 -16.10
Green, Ext. D&C, No. 1, cns lb.15.65 -16 10
Red, Ext., D&C, No 1 cns lb.13.05 -13.50
Yellow, Ext. D&C, No 1, cns lb 10 50 -10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd No
20 Chrysoidine Y dustless lb. .89 - —
27 Fast light orange 2G lb 1.29 - —
31 Phloxine 2G lb 1.05 - —
36 Yellow 2G lb 1.18 - —
40 Orange R extra, conc lb 1.52 - —
57 Fuchsine 6B lb. 1.55 - —
79 Scarlet 2R lb 1.16 - —
151 Orange AD lb. .79 - —
161 Orange lb. .94 - —
176 Fast red A lb 1.39 - —
179 Rubine XX, conc lb 1.47 - —
180 Blue F4B lb 1.31 - —
185 Brilliant scarlet 3RN, conc. lb. 1.20 - —
202 Chrome blue black R, conc. lb. 1.07 - —
203 Chrome black T lb. 1.11 - —
208 Fast blue SR lb 1.30 - —
216 Chrome red B lb 1.09 - —
234 Brown Y lb 1.27 - —
246 Blue black, extra conc. lb 1.37 - —
275 Milling red 3R, conc lb 1.91 - —
289 Navy blue 3R conc lb 1.70 - —
299 Black F, conc lb 2.19 - —
304 Neutral black 2B, conc lb 2.61 - —
326 Fast scarlet 4BNC lb 2.12 - —
332 Bismark brown RX, conc., dustless lb 1.37 - —
365 Brilliant yellow conc lb 3.11 - —
382 Scarlet B lb 2.60 - —
401 Diazo black BHD lb. .93 - —
406 Blue 2B, extra conc lb. 1.53 - —
419 Red FC lb 1.45 - —
420 Brown M lb 1.40 - —
448 Red 4BX conc lb. 1.69 - —
518 Diamine sky blue FF, extra, conc lb. 1.95 - —
561 Brown B lb 2.39 - —
581 Black EB, 200% lb 1.33 - —
593 Green BY, conc lb 1.02 - —
596 Yellow brown K, extra lb 1.26 - —
620 Yellow 2G lb 1.31 - —
639 Fast Yellow GG lb 2.32 - —
640 Yellow XX lb 2.30 - —
655 Yellow OX lb 2.64 - —
657 Green V lb 2.73 - —
662 Brilliant green G lb 3.62 - —
667 Milling green 6B conc lb 4.78 - —
671 Blue EG lb 1.85 - —
681 Crystal violet powder lb 2.15 - —
698 Violet 6BN powder lb 2.25 - —
720 Brilliant blue BBG lb 2.44 - —
729 Blue B, extra conc lb 3.61 - —
749 Red BX lb 4.76 - —
800 Chinoline yellow ZSS lb 2.67 - —
814 Yellow NN, conc lb. 3.67 - —
841 Safranine GF extra conc lb. 4.11 - —
860 Induline base ZM lb. 1.07 - —
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.
865 Nigrosine J lb 4.76 - —
922 Blue GXX lb 2.22 - —
878 Black GXCF conc lb .38 - —
1034 Alizarin red SC lb. 3.31 - —
1054 Alizarin blue SAPX lb. 3.78 - —
1078 Alizarin syanine green base Z lb 6.13 - —
1085 Alizarin blue black B lb. 3.02 - —
1096 Golden orange GFD, single paste lb 2.58 - —
1099 Dark blue BO, single paste. lb 2.28 - —
1101 Jade green N supra double paste lb 1.55 - —
1106 Blue RS double paste lb 3.85 - —
1113 Blue, BLFD, double paste lb 2.92 - —
1150 Olive R, Single paste lb 1.42 - —
dms. dlvd lb 2.29 - —
1151 Brown R single paste lb 3.00 - —
1171 Indigo synthetic 20% paste lb. .31 - —
1217 Orange RD, double powder. lb 4.60 - —
p-4 Brown PG lb 3.00 - —
p-14 Brown EB lb 2.16 - —
p-24 Gray L lb 2.08 - —
p-80 Diazo brilliant scarlet ROAD lb 3.62 - —
p-202 Diazo black VJ conc lb 2.48 - —
p-244 Brilliant scarlet BN lb 1.70 - —
p-313 Naphthol SWF lb 1.60 - —
Dyes, coaltar, oil-soluble, 100-lb drums, dlvd No.
24 Oil orange Z-7078 lb 1.06 - —
73 Oil scarlet BL lb 1.70 - —
1073 Oil violet ZIRS lb 6.81 - —
1078 Alizarin green, CG lb. 3.53 - —
1080 Oil violet special Z lb 6.81 - —
Oil black ZBC lb 4.46 - —
Oil black ZBD lb 3.03 - —
Oil black ZHH lb 4.61 - —
Oil black ZMM lb 6.52 - —
Oil blue ZN lb 8.02 - —
Oil blue ZV lb 4.95 - —
Oil orange ZMG lb 1.32 - —
Oil red N-1700 lb 1.76 - —
Oil yellow ZG, conc lb 6.33 - —
Dyes, coaltar, spirit soluble, 100 lb. dms. dlvd No
p-517 Spirit yellow 2R conc lb 4.62 - —
p-520 Spirit orange ZR, conc lb 5.87 - —
Spirit black RB lb 2.95 - —
Spirit brown ZG lb 5.30 - —
Spirit red B, conc lb 6.41 - —

E

Echinacea root, bls lb. 1.10 - —
Egg albumin (see Albumin).
Egg yolk, dried, dom. bbls lb 1.03 - 1.05
Tanners, bbls lb .06 - .06½
Elm bark, grinding, bls lb. .30 - .32
Powd., bbls., bxs. lb. .45 - —
Select, bundles lb .75 - —
Emetine hydrochloride USP, bots. oz 48.25 -49.00
Endrin, tech., dms., dlvd. 100% basis lb. 3.75 - —
Eosine red toner, bbls., works lb 1.75 - —
Ephedrine, syn., USP, anhyd., bots. 100-oz lots oz. .98 - 1.00
hydrous bots., 100-oz lots oz. .92 - —
Ephedrine hydrochloride, NF, Tins, 100-oz. lots oz. .62 - .72
Ephredine sulfate, USP, cryst., tins, 100-oz. lots oz. .62 - .75
Powd., tins, 100-oz. lots oz. .62 - .72
Epichlorohydrin, dms. c.l., dlvd lb. .35½ —
dms., l.c.l., dlvd lb. .36½ —
tanks, dlvd lb. .33 - —
l-Epinephrine base syn. USP bots., 100 gram lots gram. .60 - —
Epsom salt (see Magnesium sulfate)
Erigeron oil cns lb 5.50 - 7.50
Ergot NF dms. tin-lined lb 2.00 - —
Eserine salicylate, bots oz.72.50 -84.00
Eserine sulfate, bots. oz 87.75 - —
Ester gum gum-rosin type, dms., c.l. dlvd., Ill., Md. Ky., Mich., Mid-Atl States, N. E States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va. W Va lb. .14½ - .16
Ester gum, wood-rosin type, dms., c.l., same basis lb. .15 - .16
Ether (see specific product)
Ethyl acetate nat. ferment. 85-88%, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., dlvd lb. .16 - —
tanks, dlvd. lb. .12½ —
95-98%, dms., c.l., dlvd lb. .15¼ —
dms., l.c.l., dlvd lb. .16¼ —
tanks, dlvd. lb. .12¾ —
99%, dms., c.l., dlvd lb. .15½ —
dms., l.c.l., dlvd lb. .16½ —
tanks, dlvd. lb. .13 - —
Ethyl acetate syn., 85-88%, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .12½ —
95-98%, dms., c.l., dlvd lb. .15¼ —
dms., l.c.l., dlvd lb. .16¼ —
tanks, dlvd lb. .12¾ —
99%, dms., c.l., dlvd lb. .15½ —
dms., l.c.l., dlvd lb. .16½ —
tanks, dlvd lb. .13 - —
Ethyl acetoacetate dms., c.l., dlvd. lb. .58½ —
dms., l.c.l., dlvd lb. .59½ —
tanks, dlvd lb. .56 - —
Ethyl acrylate, dms. c.l., t.l., dlvd. lb. .36 - —
dms., l.t.l. dlvd lb. .37 - —
tanks, dlvd lb. .34 - —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E of Rockies. gal.20.58 - —
dms., l.c.l., same basis gal.20.63 -20.69
tanks, same basis gal.20.42 - —
tax-free, dms., c.l. dlvd. E of Rockies gal. .63 - —
dms., l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
Ethyl alcohol, absolute, 200 pf. tax paid, dms. dlvd. E of Rockies. gal.21.70 - —
dms., l.c.l., same basis gal.21.75 -21.81
tanks, same basis gal.21.54 - —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine)
Ethyl amyl ketone dms., c.l., dlvd. lb. .20 - —
dms., l.c.l. same basis lb. .21 - —
tanks, same basis lb. .17½ —
Ethyl benzoate, bots lb. .90 - —
Ethyl bromide tech., 98%, dms., c.l. frt. alld. E lb. .46 - —
dms., l.c.l., frt. alld E lb. .48 - —
tanks, frt. alld E lb. .43 - —
2-Ethyl butyl alcohol, dms., c.l., dlvd. works lb. .30 - —
dms., l.c.l., works lb. .30¾ - —
tanks, works lb. .28 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., t.l., works lb. .36¾ - —
tanks, works lb. .34 - —
Ethyl butyrate, works lb. .95 - 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb lots or more, works lb. .70 - —
bgs., smaller lots works lb. .72 - .80
Vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb lots or more, works. lb. .65 - .70
bgs., smaller lots, works lb. .67 - .81
Ethyl chloride, tech., cyls., works. lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Ethyl cinnamate, cns. lb. 3.45 - 3.50
Ethyl ethanolamines, mixed dms., c.l. dlvd. E lb. .43½ —
dms., l.c.l. dlvd. E. lb. .44½ —
tanks, dlvd. E. lb. .41½ —
Ethyl ether, absolute, ACS, dms. lb. .27 - —
Anesthesia, USP, hospitals, 1-lb. cns lb 1.01 - —
½-lb. cns. lb 1.09 - —
¼-lb. cns. lb. 1.21 - —
Ethyl ether, indust. dms., c.l. dlvd. lb. .12½ —
dms., l.c.l., dlvd. E lb. .13½ —
tanks, dlvd. E. lb. .10 - —
Ethyl gallate dms. 100 to 2,000-lb. lots lb. 3.90 - 4.40
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., l.c.l., l.t.l., dlvd. E lb. .38 - —
tanks, dlvd E lb. .34½ —
(2-Ethyl hexoic acid 1c. higher W. of Rockies.)
2-Ethylhexyl alcohol, dms., l.c., dlvd. lb. .24½ —
dms., l.c.l., dlvd lb. .25¼ —
tanks, dlvd lb. .21¾ —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., l.t.l. frt. equald lb. .52½ —
tanks, frt. equald lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz.11.85 - —
Ethyl nitrite (see Nitrous ether).
Ethyl oenanthate, dms. lb. 1.00 - 1.50
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd lb. .44½ —
dms., l.c.l., dlvd. lb. .45½ —
tanks, dlvd lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —
N-Ethyl-o-toluidide, bbls. lb. .88 - —
Ethylamine (see Mono, Di- or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld lb. .58 - —
tanks, frt. alld. lb. .55 - —
Ethylbenzene, 99%, dms., c.l. or t.l., frt. equald lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½ —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾ - —
Ethylene, contract, ref'y gate lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½ —
dms., l.c.l., frt. equald lb. .31½ —
tanks, frt. equald lb. .28½ —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½ —
dms., l.c.l., same basis lb. .12½ —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb higher.
Ethylene glycol, indust., dms., c.l., dlvd E lb. .16 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½ —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23 - —
tanks, dlvd. E. lb. .19½ —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, dlvd. E. lb. .18½ —
Ethylene glycol monoethyl ether acetate, dms., c.l. dlvd. E lb. .19½ —
dms., l.c.l., dlvd. E lb. .20½ —
tanks, dlvd. E. lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18½ —
Ethylene glycol monomethyl ether acetate, dms. c.l. dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E. lb. .29¾ —
tanks, dlvd. E. lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms. lb. .33 - .35
Ethylene oxide, dms., c.l., dlvd. E. lb. .21½ —
dms., l.c.l., dlvd. E. lb. .24½ —
tanks, dlvd. E lb. .15½ —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
Ethylvanillin 100-lb. fib. dms., 500-lb. lots and over lb. 6.40 - —
100-lb. fib. dms., smaller lots lb. 6.65 - 6.95
Eucalyptol, USP, cns., dms. lb. 1.65 - 1.75
Eucalyptus oil, NF, rectified, 70-80% dms lb. .62 - —
NF, rectified, 80-90%, dms lb. .72 - —
Eugenol, USP, dms. lb. 2.50 - 2.65
Euphorbia herb, bls lb. .15 - .17

F

F acid, crude, paste, bbls., works. lb. 2.10 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton.19.50 - —
Feldspar in bags $3 per ton higher
Fennel oil, sweet, USP, cns lb 2.85 - —
Fennel seed, Argentine, bgs lb. .16 - —
Czech, medium, bgs lb. .09 - —
Indian, light, bgs lb. .15½ —
Rumanian, bgs. lb. .12 - —
Fenugreek seed, Indian, bgs. lb. .10½ —
Moroccan, bgs. lb. .10½ —
Ferric acetate, liq., 28°, bbls., c.l., works lb. .09 - —
bbls., l.c.l., works lb. .09¾ —
Soln., USP IX, cbys lb. .16 - —
USP IX, djns lb. .17 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works 100 lbs 7.85 - —
Anhyd., indust., cryst., bbls., c.l., works 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
43° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
42° Be., sewage grade, tanks, frt, equald, 100% basis. 100 lbs. 3.75 - —
USP, cryst., dms., works lb. .07½ - .09
Ferric citrate, gran., dms lb .86 - —
Ferric hypophosphite, NF, dms lb 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .25¾ - —
Ferric oxalate, gran., dms lb. .85 - .87
Ferric oxides (see Iron oxides).
Ferric phosphate, NF, soluble, gran., pearls, cs lb. .64 - .65
Ferric pyrophosphate NF VII, soluble, powd. gran., pearls, dms., 10,000-lb. lots lb. .40½ —
Ferric resinate, 6¾% Fe., dms., ton lots frt. alld lb. .33 - —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld lb .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton.35.25 —
bgs., l.c.l., works ton.36.25 -42.25
bulk, c.l., works ton.33.25 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green, pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb .25½ .28½
Ferric-potassium oxalate, fine gran., dms lb .30½ .33½
Ferric-sodium oxalate, fine gran- dms lb. .25½ - .28½
Ferrous gluconate, NF, dms lb .94 - —
Ferrous sulfate, gran., bgs., c.l., works ton.34 50 —
bgs., l.c.l., dlvd. Metropolitan area 100 lbs 3.35 4.25
bbls., c.l., works ton 40 00 —
bulk, c.l., works ton 27 00 —
USP, cryst., bbls., dms lb 09½ 10
Fir, balsam, Canada, cns gal.32.00 -35.00
Oregon, bbls gal 3 75 4.00
Fir oil, Canada, cns lb 4.75 —
Fish oil, refd., alkali, dms lb .1450- .1500
Kettle-bodied, dms lb .1680- .1730
Light-pressed, dms lb .1300- .1350
tanks lb .1150- —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .14 - —
200,000 A units per gram., dms. 1,000,000 units. .15½ —
500,000 A units per gram., dms. 1,000,000 units. .16 - —
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton.130.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Chesapeake Bay area ton.125.00 - —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo-lots or more gram. 1.20 - —
10% feed grade fib dms., 15 kilos or more kilo.86.00 - —
Formaldehyde, 37%, (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0715- —
tanks, dlvd lb 0450 —
37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0740 —
tanks, dlvd lb. .0475- —
Methanol-free (uninhibited), tanks, dlvd lb. .0420- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls. lb. .60 - .61
Fuller's earth, bgs., c.l., Ill. mines, ton.19.00 - —
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton.17.50 - —
calcined, bgs., c.l., same basis. ton.20.00 -21.75
Fuller's earth, oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh, bgs., c.l., same basis. ton.17.50 -18.00
Spent, bgs., c.l. ship. point ton. 4.50 - 5.00
Fumaric acid, tech. bgs., dms., c.l., frt. alld. E lb. .27 - —
bgs., l.c.l., same basis lb. .28 - —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E. lb. .12 - —
tanks, dlvd. W. lb. .13 - —
Furfuryl alcohol, cns., works lb .29 - —
dms., c.l., Memphis, Tenn lb. .20 - —
dms., c.l., Newark, N. J. lb. .21½ —
dms., l.c.l., Memphis, Tenn lb. .21 - —
dms., l.c.l., Newark, N. J lb. .22½ —
tanks, Memphis, Tenn. lb. .184 - —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd. lb. .15½ —
Fustic extract, cryst. No. 1, bbls., l.c.l. lb. .47½ —
No. 2, bbls., l.c.l lb. .45½ —
No 3, bbls., l.c.l. lb. .43½ —
Liq., No. 1 bbls. l.c.l lb. .22½ —
l.c.l lb. .22½ —
No. 2, bbls., l.c.l. lb. .21½ —
No. 3, bbls., l.c.l. lb. .19 - —
Solid, No. 1, bxs., l.c.l. lb. .45 - —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.50 - —
Paste, bbls., frt. alld lb. 1.45 - —
Gammapicoline (see g-picoline).
Garlic oil, domestic, bots. oz. 6.05 - —
imp. bots. oz. 4.75 - —
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure (pork skin), 75 AOAC test, bbls., c.l. lb. .53 - —
150 AOAC test, bbls., c.l lb. .65 - —
200 AOAC test, bbls., c.l. lb. .72 - —
225 AOAC test, bbls., c.l. lb. .75 - —
275 AOAC test, bbls., c.l. lb. .82 - —
Gelsemium root, bls. lb. .26 - —
Gentian root, bls. lb. .23 - —
Grd., bbls., bxs. lb. .27 - —
Powd., bbls bxs. lb .27 - —
Geraniol, extra, cns., dms. lb. 4.30 - 4.35
Standard, cns., dms. lb. 2.20 - 3.15
Geranium oil, Algerian, cns. lb.16.00 -17.00
Bourbon, cns. lb.17.50 -17.80
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb. 2.85 - 3.10
Ginger oil, dist., bots. lb.18.50 - —
Ginger oleoresin, NF, from African root, bots. lb. 6.25 - 7.75
NF, from Jamaican root, bots. lb.10.00 -12.50
Ginger root, African, bls. lb. .24 - —
Cochin, bgs. lb. .17½ - .18
Jamaican, No. 2, bgs. lb. .71 - —
No. 3, bgs. lb. .69 - —
Nigerian, split, bgs. lb. .23½ - .24

Commercial quantities of

ETHYLENEDIAMINE

98%

now

on stream at

DOW

Consider the production savings a 98% concentration of ethylenediamine can offer you. Then call Dow.
This is the first time such a highly concentrated form of ethylenediamine has been made available in commercial quantities.
Write for a sample. See for yourself the saving you can make.

If you need commercial quantities, don't hesitate to place your order. We can assure you of prompt delivery. THE DOW CHEMICAL COMPANY, Midland, Michigan.

Special Note: There is no increase in price over our old 76% ethylenediamine.

YOU CAN DEPEND ON DOW

Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, bots., works lb. .25 - —
non-ret. dms., c.l., works lb. .15½- —
non-ret. dms., 1-dm. lots, works, lb. .16 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd, lb. .15 - —
104 jellygrams, bgs., c.l., same basis lb. .17 - —
131 jellygrams, bgs., c.l., same basis lb. .18 - —
191 jellygrams, bgs., c.l., same basis lb. .21 - —
222 jellygrams, bgs., c.l., same basis lb. .22 - —
Glue, bone, green, dry bone, 40 jellygrams, bgs., c.l., same basis lb. .13½- —
65 jellygrams, bgs., c.l., same basis lb. .13¾- —
86 jellygrams, bgs., c.l., same basis lb. .14 - —
115 jellygrams, bgs., c.l., same basis lb. .15 - —
135 jellygrams, bgs., c.l., same basis lb. .15 - —
164 jellygrams, bgs., c.l., same basis lb. .16 - —
180 jellygrams, bgs., c.l., same basis lb. .17 - —
200 jellygrams, bgs., c.l., same basis lb. .18½- —
Bone glue, l.c.l., prices 1c. higher.

Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .15 - —
95-121 bgs., c.l., dlvd lb. .16 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-298, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362, bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427 bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .43 - —
Hide glue, l.c.l., prices 1c. higher.
1-Glutamic acid, 99½%, fib dms., 100-lb. lots, frt. alld lb. 2.00 - —
fib. dms., 25-lb. lots, frt. alld. lb. 2.05 - —
1-Glutamine, bots. gram .65 - —
Glycerine, crude, dom., nat., saponification, 88%, dlvd. tanks lb. .1595 Nom.
Soaplye, 80%, tanks, c.i.f. lb. .145 Nom.
Imp., nat. saponification, 88%, c.i.f. lb. .1595-
Soaplye, 80%, tanks, c.i.f. lb. .145 - —
Glycerine, nat., refd., USP, CP, 99%, high gravity, dms., c.l., dlvd, lb. .29⅜-
dms., l.c.l., dlvd lb. .29⅞-
tanks, dlvd lb. .27⅞-
96%, dms., c.l., dlvd lb. .28½- —
dms., l.c.l., dlvd. lb. .29 - —
tanks, dlvd. lb. .27 - —

Glycerine, nat., refd., high gravity, dms., c.l., dlvd lb. .29¼- —
dms., l.c.l., dlvd lb. .29¾- —
tanks, dlvd lb. .27¾- —
high gravity, yellow, dist., dms., c.l. lb. .28½- —
dms., l.c.l., dlvd lb. .29 - —
Glycerine, syn., dms., c.l., dlvd lb. .29½- —
dms., l.c.l., dlvd lb. .30 - —
tanks, dlvd lb. .28 - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 4.10 - —
Grapefruit oil, dms lb. 1.50 - —
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice, all hog, dlvd lb. .09½- .09⅝
Yellow, tanks, dlvd. lb. .07⅞- .08
Grease oil, No. 1, dms., c.l. lb. .15¾- —
dms., l.c.l. lb. .16¾- .18¾
extra winter, strained, dms., c.l. lb. .18¼- —
dms., l.c.l. lb. .19¼- .21¼
prime, burning, dms., c.l. lb. .19¾- —
dms., l.c.l lb. .20¾- .22¾

Green Pigments

Green pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls lb. .45 - —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., cbys., dms lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms lb. 3.40 - 3.45
Guar gum, food grade, bgs lb. .50 - —
Tech. grade, bgs lb. .40 - —
Guaiacwood oil, cns. lb. 1.15 - —

Gums

Gum quotations, formerly grouped under one heading, are now listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton. 20.30 - —
Gypsum, terra alba, dom., 100-lb. paper bgs., trucks, same basis ton. 20.00 - —
100-lb. paper bgs., trucks, works, New York ton. 17.00 - —
Imp., English, 100-lb. paper bgs., ex dock, New York ton. 55.00 - —
100-lb. paper bgs., ex whse. ton. 60.00 - 62.00

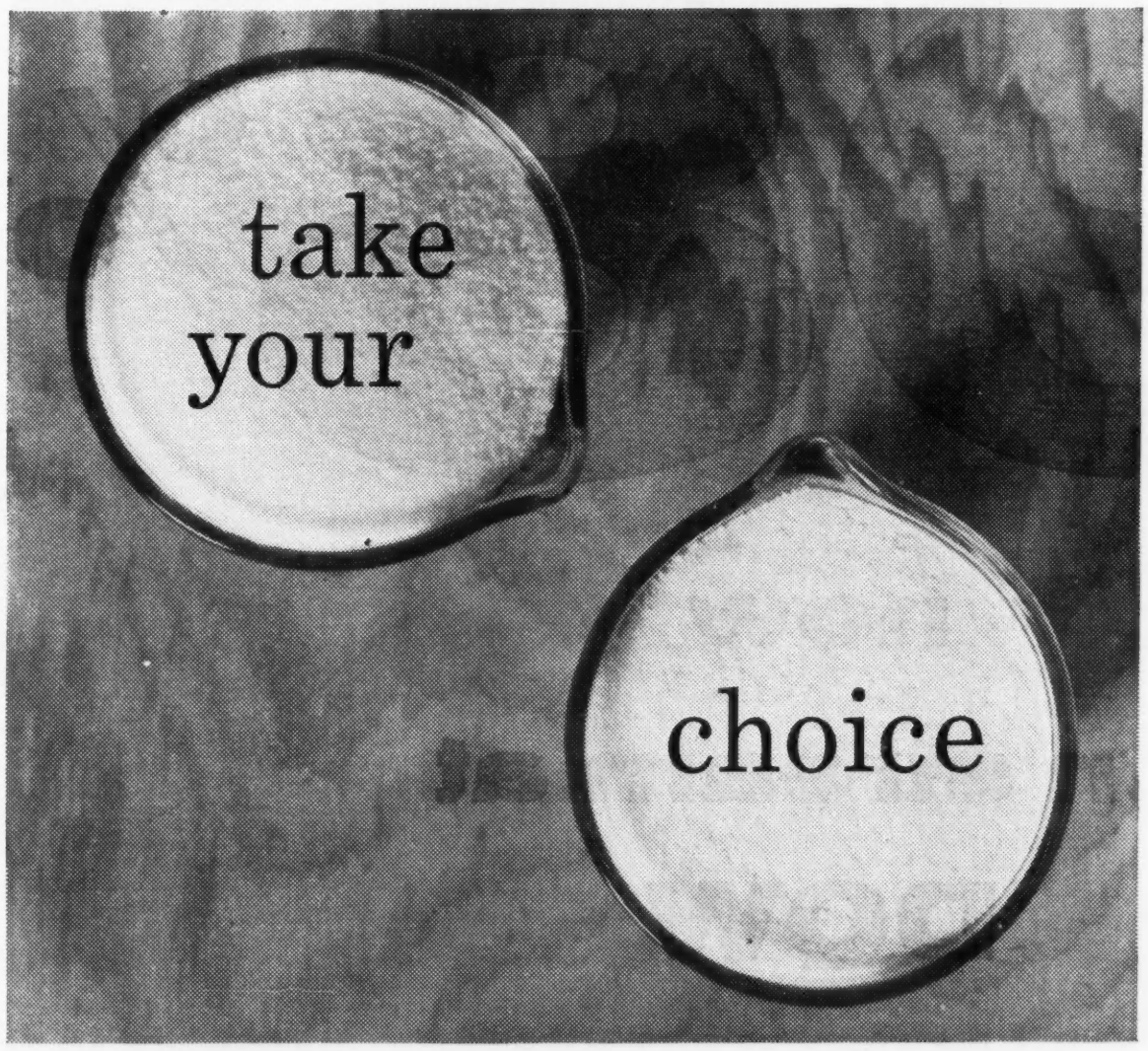
H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis lb. 1.00 - —
Hansa yellow, 10 G, bbls., same basis as yellow, chrome lb. 2.35 - —
Hansa G pigment, bbls lb. 2.20 - —
Hawthorn berries, bgs lb. .21 - —
Heliotropin, 100-lb. lots, dms lb. 3.25 - 3.50
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls., l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb. .41 - —
No. 4, bbls., l.c.l lb. .39 - —
No. 5, bbls., l.c.l lb. .37 - —
Paste, No. 1, bbls., l.c.l lb. .20½- —
Hemlock oil, cns lb. 2.10 - 2.50
Henbane leaves, bls lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal .20 - —
tanks, Baytown, Tex gal. .16¼- —
tanks, Borger, Tex gal. .16¼- —
Hesperidin, purif., 25 lb. lots, f.o.b., works lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb lots, works lb. 22.50 - —
bots., 5-lb. lots, works lb. 23.00 - —
bots., 1-lb. lots, works lb. 23.50 - —
Hexachlorophene, dms lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis. lb. .243 - —
smaller lots, same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48¼
Hexane, indust., tanks, Bayonne, N. J gal .20 - —
tanks, Baytown, Tex gal. .17 - —
tanks, Borger, Tex gal. .17 - —
1-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l., works lb. .35¾- —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works lb. .76 - —
Hexyl salicylate, dms lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .15 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
dms., smaller lots, dlvd lb. 14.50 - —
Homatropine hydrobromide, USP, bots oz. 5.50 - —
Homatropine methylbromide, USP, bots. oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100% ret. dms., works lb. 1.60 - 1.80
Hydriodic acid, 1.50 s.g., cbys lb. 2.94 - —
1.70 s.g., cbys lb. 3.23 - —
Hydroabietyl alcohol, tech., solid, zone 1 dms. c.l., dlvd lb. .29¼- —
dms., l.c.l., dlvd lb. .29¾- .30¼
tanks dlvd lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., dlvd E lb. .37 - .43
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton. 28.00 - —
Hydrochloric Acid, 20°, cbs., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton. 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton. 35.00 - —
Hydrochloric acid, CP, USP, consumers cbys, extra c.l, works, lb. 15¾ - —
cbys., l.c.l., same basis lb. .17¼ - .17¾
5-pint bots., extra, cs., c.l., same basis lb. .20¾ - —
5-pint bots., extra, cs., l.c.l., same basis lb. .22¼ - .23¼

Fine Granular...or Powder Form?



PFIZER FUMARIC ACID

now available in two mesh sizes to improve end-results and speed production of alkyd resins, rosin adducts, polyesters

● One of these fumaric products is tailored to fit your specific production needs...*take your choice.*

1. The *fine granular form* of Pfizer Fumaric Acid is uniform, flows more freely and dusts far less than the standard fumaric acid products.

2. The *powder form* of Pfizer Fumaric Acid gives very even distribution and blending, settles out less when a fine-particle size is needed.

Always look to Pfizer as your dependable source for high quality fumaric acid—a non-volatile, odorless, non-corroding and nontoxic acid that rates tops with the coatings industry. Write us for a free sample of either the fine granular or powder form of Pfizer Fumaric Acid.

Manufacturing Chemists For Over 100 Years

Pfizer

CHAS. PFIZER & CO., INC.
Chemical Sales Division
630 Flushing Ave., Brooklyn 6, N. Y.
Branch Offices: Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Texas

Hydrocortisone acetate, bulk, bots., 100 grams or more gram. 4.50 • —
Hydrocortisone alcohol, bulk, bots., 100 grams or more gram. 4.50 • —
Hydrocyanic acid, cyls., c.l., dlvd. lb. .70 • —
cyls., l.c.l., same basis lb. .75 • .90
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots. lb. .40 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 • —
55-gal. dms. l.c.l. t.t.l., dlvd., 100 lbs.20.75 • —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 • —
20-gal dms. l.c.l. t.t.l., dlvd. 100 lbs.22.50 • —
tanks, works, frt. equald. 100 lbs.15.50 • —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 • —
Hydrofuramide, dms. fib. ctns., works lb. .30 • .40
Hydrogen chloride, anhyd., 50-lb. cyls. l.c., works lb. .45 • —
50-lb. cyls. l.c.l. works lb. .55 • .60
Hydrogen cyanide, liq., 98%, tanks, works lb. .16 • —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls., dlvd. W lb. .39 • —
tanks, works lb. .21 • —
Hydrogen peroxide, USP, bbls., dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd lb. .202 • —
dms., l.c.l. dlvd lb. .211 • —
tanks, dlvd lb. .1800- —
Hydroquinone photo grade, dms lb. 1.03 • 1.06
Tech., dms., c.l., dlvd lb. .82½- —
dms., l.c.l. dlvd lb. .84½- —
Hydroxyacetic acid, tech., 70%, non-ret. bbls. Phila. 100% basis lb. .136 • —
tanks, Belle, W. Va., 100% basis lb. .093 • —
Hydroxycitronellal, cns lb. 6.00 • 7.45
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots.oz. 6.00 • 7.00
Hyoscyamine sulfate, bots oz. 6.00 • 6.50
Hypernic extract, cryst. No. 1, bbls., l.c.l. lb. .52 • —
Liq., No. 1, bbls., l.c.l. lb. .35 • —
No. 2, bbls., l.c.l. lb. .27 • —
Hypophosphorous acid, purif., 50%, cbys lb. 1.30 • 1.33
USP, cbys lb. .88 • —

I

Ichthammol, NF, dms., jars lb. .75 • .93
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indol, CP, bots. lb. 16.00 • 18.25
Inositol, bots., dlvd lb. 5.00 • —
dms., dlvd lb. 4.50 • 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.10 • —
Resub., USP, dms., jars lb. 2.30 • 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 • —
Iodoform, NF, dms., kgs lb. 4.90 • 5.00
a-Ionone, cns. lb. 4.65 • 4.70
b-Ionone, cns. lb. 4.80 • 4.90
Ipecac root, bgs., whole lb. 7.50 • —
Powd., bbls., bxs lb. 7.85 • —
Irish moss, bleached, prime, bls lb. .28 • .34
Iron blue, reg., bbls., c.l., dlvd. E lb. .52 • —
bbls., l.c.l., ton lots, same basis lb. .53 • —
bbls., smaller lots, same basis, lb. .54 • —
Iron blue, alkali-resisting, bbls., c.l., same basis lb. .57 • —
bbls., l.c.l., ton lots, same basis, lb. .58 • —
bbls., smaller lots, same basis, lb. .59 • —

Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col., and Nev.

Iron compounds (see Ferric or Ferrous)
Iron oxide black, pure, bgs., c.l., works lb. .13¼- —
bgs., l.c.l., works lb. .13½- —
Iron oxide brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide hydrated yellow, pure, bgs., c.l., works lb. .11½- —
bgs., l.c.l., works lb. .11¾- —
Iron oxide metallic brown, bgs., works lb. .04 • —
Iron oxide metallic red, bbls., c.l., works lb. .02½- —
bbls., l.c.l., works lb. .02¾- —
Iron oxide Persian Gulf red, bgs., c.l. works lb. .07¾- —
Iron oxide red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y. lb. .12¾- —
Iron oxide red, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley O., Easton, Pa. bgs. c.l., works lb. .0675- —
bgs., l.c.l., works lb. .08 • —
Iron oxide Spanish red, bbls., c.l., ex dock lb. .03¾- —
bbls., l.c.l., ex dock lb. .06 • —
bbls., l.c.l., ex whse, New York lb. .06½- —
Iron oxide yellow, nat., French type, bgs., c.l., works lb. .06 • —
Peruvian type, bgs. l.c.l lb. .0205- .0345
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .28 • —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Isoborneol, cns. lb. 1.80 • —
Isobornyl acetate, cns lb. .46 • .70
Isobornyl formate, dms. lb. .70 • .75
Isobornyl propionate, dms lb. 1.15 • 1.45
Isobutyl acetate, perfume grade, cns lb. .73 • 1.00
Solvent grade, dms., c.l., dlvd. E, of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .16 • —
dms., l.c.l., dlvd lb. .17 • —
tanks, dlvd lb. .13½- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd lb. .28½- —
Tech., dms., c.l., dlvd lb. .21½- —
dms., l.c.l., dlvd lb. .22½- —
tanks, dlvd lb. 19½ —
Isoeugenol, cns. lb. 4.05 • 4.80
Isoniazid, powd., bulk, 25-kilo lots or more kilo.23.00 -25.50
bulk, smaller lots kilo.24.00 -26.00
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms. c.l., dlvd. E. lb. .23¼- —
dms., l.c.l., dlvd E lb. .24½- —
tanks, dlvd E lb. .21 • —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l. works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isopropyl acetate, dms. c.l., dlvd. lb. .14 • —
dms., l.c.l., same basis lb. .15 • —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .53 • —
dms., l.c.l., dlvd gal. .60 • —
tanks, dlvd gal. .37 • —
Refd., 95%, c.l., dms., dlvd gal. .55 • —
dms., l.c.l., dlvd gal. .62 • —
tanks, dlvd gal. .39 • —
Refd., 99%, dms., c.l., dlvd gal. .57 • —
dms., l.c.l., dlvd gal. .64 • —
tanks, dlvd gal. .41 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms. dlvd lb. .07 • —
dms., l.c.l., dlvd lb. .08 • —
tanks, dlvd lb. .03 • —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) 70% in xylol, dms., c.l., t.l., works lb. .70 • —
dms., l.c.l., works lb. .714 • .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 • —
450-lb. fib. dms. l.c.l. works lb. .80 • .90
Isoquinoline, dms., works lb. .65 • 1.25
Itaconic acid, purif., fib. dms., c.l., works lb. .54 • —
fib. dms., l.c.l., works lb. .55 • —
Tech., fib. dms., c.l., works lb. .44 • —
fib. dms., l.c.l., works lb. .45 • —

J

J acid, paste, bbls. works, 100% basis lb. 2.45 • —
Powd., bbls., same basis lb. 2.50 • 2.85
Jalap root, NF, bls lb. .90 Nom.
powd., bbls., bxs lb. 1.15 Nom.
Japan wax, cs. lb. .35 • .36
Juniper berries, bgs lb. .18 .20
Juniper berry oil, bots lb. 2.75 • 4.00
Twice rectified, bots lb. 3.60 • 7.00
Juniper tar, NF, dms lb. .42 • .60
Juniper tar oil, NF (see Juniper tar).
Juniper wood oil, tech., cns lb. .38 • .53

K

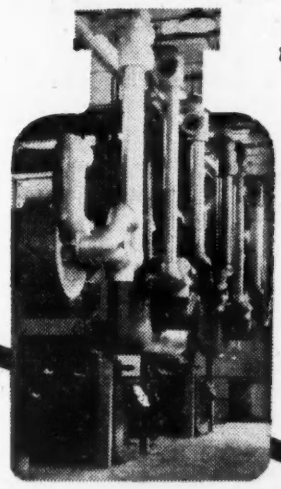
Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms lb. .10 • .12
colloidal, fib. dms lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bbls. lb. .45 • —
No. 2, powd., bbls lb. .33 • .38
No. 3, powd., bbls lb. .30 • .33
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 • —
Kola nuts, bgs lb. .15 • —

L

L acid, bbls., works lb. 1.25 • —
Lacquer diluent, petroleum, 150°, 240° F b.r., tanks, west coast, ex tax, Los Angeles gal. .174 • —
tanks, east coast, N. J., N. Y. gal. .20 • —
Benzene type, tanks group 3 gal. .1550- —
Toluene type, tanks group 3 gal. .14375 —
Lactic acid, edible, 50%., bbls., dms., c.l., frt. equald lb. .1780- .2100
bbls. dms., 20 or more, frt. equald lb. .1830- .2150
bbls. dms. 5 to 19, frt. equald. lb. .1880- .2200
bbls. dms. 1 to 4, frt. equald. lb. .1930- .2250
80% c.l. bbls., dms., frt. equald. lb. .3030- .3600
dms., frt. equald lb. .3030- .3600
bbls., dms., 20 or more, frt. equald lb. .3080- .3650
bbls. dms. 5 to 19, frt. equald. lb. .3130- .3700
bbls. dms. 1 to 4, frt. equald. lb. .3180- .3750
Lactic acid, plastic grade, 50%, c.l., bbls., works lb. .2100- —
bbls. 20 or more, works lb. .2150- —
bbls., 5 to 19, works lb. .2200- —
bbls., 1 to 4, works lb. .2250- —

T

NOW READY... 'ROCHE' Aromatics



Compressors and refrigeration units.

the new perfumery raw materials

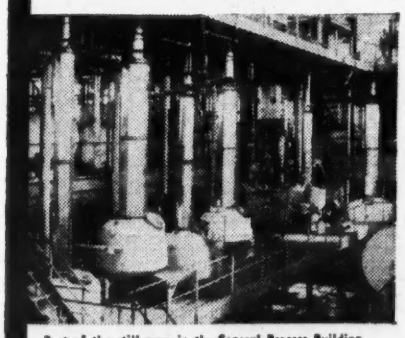
completely independent of any natural source

No longer need the perfume designer or manufacturer be subject to the esthetic or economic uncertainties of natural sources for many of the most important basic materials. Years of intensive research by Hoffmann-La Roche have resulted in the development of completely pure chemical substances which will now be in constant supply without speculation and wide fluctuation in prices. Unvarying purity—from pound to pound, from ton to ton—is assured by the process itself as well as by the large, new plant designed and built to fit this process.

Esthetically, 'Roche' Aromatics offer the perfumer unexplored possibilities for new, interesting fragrances.

Economically, 'Roche' Aromatics offer previously unattainable stability in supply and costs for long-range planning and purchasing.

now available



Part of the still area in the General Process Building.

LINALOOL 'Roche'

A purer material than any previously offered to the industry. Free from the impurities present in the linalool from natural sources. Contains no other alcohols or terpenes. Olfactorily pure and floral in character. No residual 'after odor.' Unusually stable in soap.

LINALYL ACETATE 'Roche'

A very pure linalyl acetate containing no other esters and no terpenes. The Roche special process also precludes the formation of any other alcohols during the esterification process. Olfactorily pure and clean in odor. No residual 'after odor.' Unusually stable in soap.

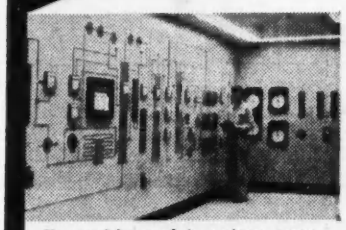
GERANYL ACETONE 'Roche'

A completely new synthetic aromatic. Possesses a soft green odor with a rose note. A good base for synthetic lavender, geranium and rose bouquet. Stable in soap.

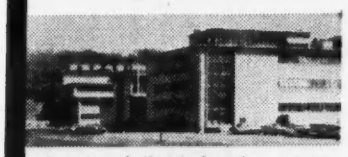
NEROLIDOL 'Roche'

Pure nerolidol. Light balsamic odor. Excellent fixative. Blends well with any perfume compound.

Detailed information on each product will be furnished on request.



Flow panel for one of the continuous processes.



Processing of 'Roche' Aromatics progresses through these three newly completed buildings at Roche Park. In the foreground is the General Process Building, next the Diketene Building, and (to the left) the Ethynylation Building.

For new art and economics in perfumery 'Roche' Aromatics are available through principal essential oil distributors

AROMATICS DIVISION

HOFFMANN-LA ROCHE INC • Roche Park • Nutley 10 • New Jersey • NUtley 2-5000

New York City: OXford 5-1400

Lactic acid, plastic grade, 80%, bbls., c.l., works lb. .3600 - —
bbls., 20 nr more, works lb. .3650- —
bbls., 5 to 19, works lb. .3700- —
bbls., 1 to 4, works lb. .3750- —
Lactic acid, tech., 22% bbls., c.l., works, 100 lbs. 6.30 - —
bbls. l.c.l., works 100 lbs. 6.70 - —
44%, bbls., c.l., works 100 lbs. 11.95 - —
bbls., l c.l., works 100 lbs. 12.35 - —
USP, 85% cyls lb. .85 - .88
Lactose, edible, bgs. 23,000-lb. lots, frt. equald lb. .14 - —
bgs. 6,000-lb. lots frt equald. lb. .14½- —
bgs., 2,000-lb. lots, frt. equald. lb. .14¾- —
bgs., 200-lb. lots, frt equald lb. .15¼- —
Edible lactose in fib. dms., ½c higher.
Lactose, ferment. grade, bgs., c.l., works lb. .08½- —
USP, fib. dms. 30,000-lb lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
fib. dms., 200-1,800-lb. lots, frt. equald lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.
Lady's slipper root, bls. lb. 3.50 Nom.
Lake C red toner, alizarine, bbls., works lb. 1.20 - —
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., mds., works lb. .24 - .26
hydrous, dms., works lb. .23 - .25

Lard, cash, dms, Chicago lb. .1275- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .35 - —
Laurel leaf oil, dms, cns lb. 9.75 -12.50
Laurent's acid, bbls lb. .60 —
Lauric acid, 90%, dms lb. .35¾- .37¾
tanks lb. .33¾- .34
Lauryl alcohol, bots lb. 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. .65½- —
dms., l.t.l. works lb. .68 - —
Lavender flowers, medium, bls lb. .75 - .80
Ord., bls. lb. .25 - .40
Select, bls. lb. .90 - —
Lavender flower oil, USP, French, 35-37% ester, cns lb. 7.50 - —
38-40% ester, cns lb. 10.00 - —
40-42% ester, cns lb. 12.00 - —
Spike, Spanish, cns lb 2.60 - —
Lavandin oil, cns., dms. lb. 2.40 - 2.55
Lead acetate, NF cryst., gran., powd lb. .34½- —
White, cryst., bbls lb. .25½- —
gran., bbls. lb. .26½- —
powd. bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
3-lb. bgs. or larger, l.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l. lb. .41½- —
1-lb. bgs., l.c.l. lb. .42½- —
Lead blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼- —
bbls., l.c.l., same basis lb. .18¼- —

Lead carbonate (see Lead, white, basic cabonate).
Lead chloride, dms lb. .45 - —
Lead iodide NF V jars lb. 3.82 - —
Lead linoleate, fused, 26% Pb, dms, lb. .33 - —
Lead metal, prime, pigs., New York, lb. .14 - —
St. Louis lb. .1380- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .20 - —
bgs. l.c.l., same basis lb. .2075- —
Lead naphthenate liq., 16% Pb, dms. dlvd lb. .17 - —
24% Pb, dms., dlvd lb. .21 - —
Solid, 37% Pb, dms. dlvd lb. .27½- —
Lead nitrate, bbls lb. .26¾- —
Lead orthosilicate-gel, 50-60% PbO, dms. works lb. .29¾- .34¼
Lead peroxide, tech. powd., bbls lb. .38¾- .40¼
Lead phthalate dibasic dms. works, lb. .41 - —
Lead, red, 93% Pb_3O_4 or less, bbls., c.l., works frt. alld lb. .16¼- —
bbls., l.c.l., same basis lb. .17¼- —
97% Pb_3O_4, bbls. c.l., same basis, lb. .1695- —
bbls., l.c.l., same basis lb. .1795- —
98% Pb_3O_4, bbls. c.l., same basis, lb. .1785- —
bbls., l.c.l., same basis lb. .1885- —
Lead resinate, precip. 23% Pb, dms., ton lots, dlvd lb. .35 - —
Lead salicylate, normal, dms., works, lb. .46 - —
Lead silicate, (see Lead, white, basic silicate).
Lead sulfate (see Lead, blue, basic sulfate).

Lead tallate, liq., 16% Pb, dms lb. .18 - —
24% Pb, dms. lb. .18½- —
Solid, 39% Pb, dms. lb. .23¾- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld. lb. .19 - —
bgs., l.c.l. same basis lb. .20 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17¼- —
bgs., l.c.l., same basis lb. .18¼- —
Lead, white, basic sulfate, bgs., c.l., shipt. pt., frt. alld lb. .17¼- —
bgs., l.c.l., same basis lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works, lb. .14 - .15
non-ret. dms. l.c.l., same basis lb. .16 .17
Edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .15 .16
Lemon bioflavonoid complex, fib. dms., 25-lb. lots, works lb 9.00 —
Lemon oil, terpeneless bots lb. 44.00 -50.00
USP, Calif. cns., dms. lb. 3.25 - 4.00
Messina, cns. lb. 5.25 - 8.25
Lemongrass Oil, cns., dms. lb 1.30 —
dl-Leucine, dms., works lb. 12.25 -15.00
Licorice root, gran., bls. lb .15 - .17
Powd., bls. lb. .12 - .15
Whole, bls. lb. .10 - .12
Lignaloe wood oil, Mexican, cns lb. 4.65 5.00
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½ —
bgs., l.c.l., works lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., Metropolitan New York destination, freight equalized with nearest producing pt ton. 20.82 - —
Hydrated, bulk, c.l., same basis, ton. 22.32 - —
Spray, bgs., c.l., same basis ton. 26.32 - —
Lime oil, dist., Mexican, cns. lb. 5.25 - 6.25
West Indian, cns. lb. 6.00 - 7.00
Expressed West Indian, cns lb. 8.25 - 8.50
Terpeneless, bots. lb. 50.00 -85.00
expressic lb. 90.00 -100.00
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Limestone grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 5.80 - 7.00
Ex linaloe wood oil dms lb. 5.30 - 7.10
Synthetic, dms., works lb. 5.50 - —
Linalyl acetate, ex bois de rose, 90-92%, dms. lb. 5.85 - 7.00
96-98%, dms. lb. 5.25 - 6.60
Ex petitgrain, bots. lb. 4.80 - 5.90
Synthetic, dms., works lb. 5.50 - —
Lindane, 25% formulation, dealers, dms., frt. alld lb. 1.58 - 1.68
99%, tech., formulators, dms., frt. alld lb. 2.65 - 3.25
Linden flowers, with leaves, bls lb. .25 - —
Without leaves, bls lb. .30 - —
Linseed meal, expeller, 32-34% bulk, Midwest mills ton. 49.50 - —
Extracted, 36%, bulk, same basis, ton. 45.50 - —
Linseed oil, raw, dms., c.l., New York lb. .1680- —
dms., l.c.l., New York lb. .1780- .1830
tanks, f.o.b., Minneapolis lb. .1320- —
tanks, New York lb. .1460- —
tankwagon, New York lb. .1490- .1510
Boiled linseed oil, .006c. per lb. higher
Linseed oil acids, dist., dms. lb. .1980- —
Water-white, dms. lb. .2280- —
Linseed pitch, dms. lb. .06 - .06¾
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .16 - —
bbls., l.c.l., same basis lb. .17 - —
Lithium benzoate, dms. lb. 1.65 - 1.67
Lithium bromide, NF, dms., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30½
Tech., dms., c.l., t.l., dlvs., frt. alld. works lb. .77 - —
dms., l.c.l., same basis lb. .88 - —
Lithium chloride, CP, anhyd., ton lots lb. 1.23½- —
Lithium chloride, tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld. lb. 1.00 - —
dms., l.c.l., same basis lb. 1.05 - —
Lithium citrate, NF, dms., ton lots. lb. 1.50 - —
Lithium fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½- —
bbls., ton lots, dlvd. lb. 2.18½- —
bbls., less ton lots, dlvd. lb. 2.23½- —
Lithium hydride, powd., dms., 500-lots, works lb. 10.50 -12.50
Lithium hydroxide, monohydrate, dms., dlvd lb. .78 - —
Lithium manganite, dms., works lb. .95 - 1.15
Lithium nitrate, tech., dms., 100-lb. lots lb. 1.25 - —
Lithium salicylate dms lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.30
Lithium stearate, dms., c.l., works, lb. .47½- —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots, lb. 1.15 - —
Lithium titanate, dms., works lb. 1.15 - 1.35
Lithol red toner, bbls., works lb. .93 - —
Lithol-rubine red toner, pure bbls., works lb. 1.50 - —
Resinated, bbls., works lb. 1.40 - —
Lithopone, ord., bgs., c.l., dlvd. E, lb. .08¾- —
bgs., l.c.l., dlvd E lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l. dlvd lb. .12 - —
Lobelia herb, bls. lb. .95 - —
Lobeline sulfate, bots., works oz. 37.50 -38.50
Locust bean gum, powd., bgs lb. .45 - —
Logwood extract, cryst., No. 1, bbls., l.c.l. lb. .41 - —
No. 2, bbls., l.c.l. lb. .39 - —
Liq. No. 1, bbls., l.c.l. lb. .20 - —
No. 2, bbls., l.c.l. lb. .19 - —
No. 3, bbls., l.c.l. lb. .18½- —
Solid, No. 1, boxes, c.l. lb. .35 - —
Lycopodium, cs lb. 4.50 - —
dl-Lysine monohydrochloride, fib. dms lb. 12.00 - —
l-Lysine monohydrochloride, fib dms., 25 lbs. or more lb. 12.00 -14.00

M

Mace, Siauw, bls. lb. 2.70 - —
West Indian, No. 1, bls., shipment lb. 3.00 - —
Mace oil, dist., cns., dms lb. 14.00 - —
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26¼
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb. .29¾- .30½
rubber grade extra light, bgs., c.l., frt. equald lb. .29¾- —
bgs., l.c.l., frt. equald. lb. .30½- —
USP, light, bgs lb. .36½- .37½
heavy, fib. dms. lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald. ton. 82.50 - —

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!

M. C. P.

Pure
Unadulterated
California

LEMON OIL

U.S.P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one* label and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anahiem, Calif.

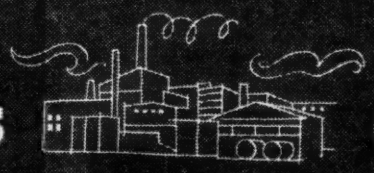
W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

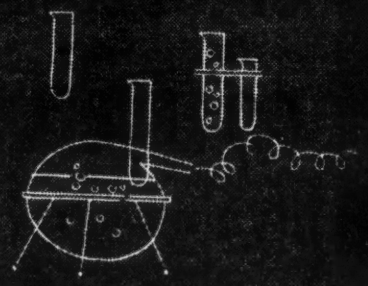
Now you can choose...

the Lactose best suited for

your particular application

from Western Condensing

Company's  complete line

of milk sugars. 

Select from...5 grades of Lactose *(providing over 10 granulations)*

1. LACTOSE U.S.P. 2. LACTOSE U.S.P. SPRAY PROCESS 3. LACTOSE EDIBLE
4. CRUDE MILK SUGAR 5. LACTOSE FERMENTATION GRADE

Here's good news for every user and potential user of Lactose. Now you can select the proper grade and granulation of milk sugar you need for each application:

Whether, for example, you make moulded or compressed tablets, baby food formulas, pie crusts, fudge, flavorings or antibiotics you can now choose a Lactose of specific grade and granulation to insure top performance.

When you use the correct grade and granulation of Lactose for each product you improve the efficiency of your operation with substantial reductions in *cost*. Let us help you in your selection by sending you samples and information about the most complete line of milk sugar available:

Write us today for sample, prices and detailed information. Address Technical Sales Department 123

WESTERN CONDENSING COMPANY
Appleton, Wisconsin

A WORLD-WIDE SUPPLIER OF HIGH-QUALITY MILK DERIVATIVES

Distributed by **McKESSON & ROBBINS, INC.** Chemical Department
and their West Coast Branch, **MEFFORD CHEMICAL COMPANY**

Magnesite—Methyl Bromide

Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton. 46.00 — —
Magnesium bromide cs. jars lb .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
bgs., t.l., frt. equald lb. .11 - —
bgs., l.c.l., frt. equald lb. .12½- .13½
USP, bgs., c.l., frt. equald lb. .13 - —
bgs., t.l., frt. equald lb. .13½- —
bgs., l.c.l., frt. equald lb. .14½- .15½

Above prices are quoted f.o.b. works, freight equald, with metropolitan New York and competitive producing points.

Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
Hydrous, 99% flake, bgs., c.l., works ton. 55.00 - —
bgs., l.c.l., works ton. 65.00 -80.00
Magnesium gluconate dms., cns lb. 1.34 - 1.41
Magnesium hydroxide NF, powd., bbls., dms., kgs. lb. .23½- .27
Magnesium metal, 99.8% ingots, 10,000-lb. lots or more, works lb. .36 - —
Pigs, 10,000-lb. lots or more, works lb. .35¼- —
Sticks, cs., works, frt. alld. on carlots lb. .39 - —

Magnesium oxide (see Magnesia, calcined).
Magnesium nitrate, cryst., dms., works lb. 29 - —
Magnesium peroxide, 15%, dms., works lb. 1.00 - 1.05
Magnesium phosphate tribasic, NF, bbls. lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb. .10¼- .12
Magnesium sulfate tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .43 - —

Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.

Malachite green, straight, PTMA, bbls., works lb. 5.30 - —
Malathion, dms., c.l., works lb. .90 - —
dms., l.c.l., works lb. .93 - 1.03

Maleic acid, cryst., powd., dms. lb. .37 - .38
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .26½- —
dms., l.c.l., dlvd E. of Rockies lb. .29½- —
tanks, dlvd. E. of Rockies lb. .27½- —

Prices on maleic anhydride W. of Rockies, 1½c. per lb. higher.

Malic acid, tech., dms lb. .30 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .50 - .55
Manganese acetate, bbls., dlvd lb. .35 - —
Manganese arsenate, bgs. lb. .16 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, bbls., works lb. .22 - —
Manganese chloride, anhyd., dms., works lb. .25½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works ton. 148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis ton. 144.50 - —
40,000 to 99,999-lb. lots, dms., same basis ton. 152.50 - —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.

Manganese gluconate, dms lb. 1.80 - 1.94
Manganese hydrate, bbls., dlvd lb. .26 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .22½- —
Solid, precip., 8.2% Mn, bbls. lb. .37½- —

Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34 - —
dms., ton lots, dlvd. E lb. .36 - —
dms., smaller lots, dlvd. E lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .27 - —
Manganese resinate, fused, 3½% Mn, dms lb. .24 - —
Precip., 6½-7% Mn, dms lb. .30 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S. E ton. 97.50 - —
bgs., l.c.l., dlvd. S.E ton. 104.50 - —
Manganese tallate, 6% dms lb. .24 - —
Mangrove bark, E. African, 38% tannin, bgs., c.l., ex dock. ton. 62.00 - —
South American, 30% tannin, bgs., c.l., ex dock ton. 54.00 -57.00
Manila copal gum, C, bgs lb. .34¾- .38
CBB, bgs lb. No. stocks.
DBB, bgs. lb. .25 - .28
DK, bgs lb. No stocks.
DK, dust., bgs lb. .14 Nom.
MA, soft, bgs lb. .19¾- .22
WS, bgs lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
bgs., l.c.l., works lb. .31 - —
Menadione, USP, bots gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .08¼- —
Menthol, nat., USP, Brazilian, cs lb. 6.00 - 6.50
Syn., USP, racemic, cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .42 - —
bgs., fib. dms., less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .52 - —
bgs., fib. dms., less ton lots, same basis lb. .54 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
NF, gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Mercuric cyanide, NF, VIII, powd., fib. dms lb. 6.84 - —
Mercuric iodide, red, NF X, fib. dms. lb. 7.72 - —
Mercuric oxide, red, NF X, powd., fib. dms lb. 5.97 - 6.01
Tech., c.l., works, tech. lb. 5.77 - —
NF X, fib. dms. lb. 6.14 - —
Mercuric oxide yellow, bbls., tech., 1,000-lb. lots lb. 5.58 - —
bbls., smaller lots lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lb. per flask, net-flask. 252.00 -257.00
Mesityl oxide, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16 - —
tanks, dlvd. lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .78
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works lb. .47 - —
dms., smaller lots, works lb. .47½- .50
tanks, works lb. .45 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .53 - —
Syn., zone 1, dms., c.l., or t.l. min., frt. alld. or dlvd gal. .48½- —
dms., l.c.l., works gal. .35½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. metropolitan area gal. .35½- —
tankwagon, 4,000 gal., min., frt. alld. or dlvd gal. .32½- —
tankwagon, 4,000 gal. min., works, Carteret, Camden, N. J gal. .29½- —
Syn., zone 2, dms., c.l., or t.l. min. frt. alld. or dlvd gal. .51½- —
dms. l.c.l., works gal. .38½- —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. metropolitan areas gal. .38½- —
Zone 2, tanks, 4,000 gal. min., frt. alld. or dlvd gal. .35½- —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd, zone 1 lb. .20½- —
non-ret. dms., l.c.l., same basis lb. .21 - —
Methyl abietate, hydrogenated non-ret. dms., c.l., dlvd., zone 1 lb. .21 - —
non-ret. dms., l.c.l., same basis lb. .21½- —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala. Ga.; Fla., S C. and Tenn

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .63½- —
Syn., dms., c.l., frt. alld. E gal. .66 - —
dms., l.c.l., frt. alld. E gal. .72 - —
tanks, frt. alld. E gal. .51 - —

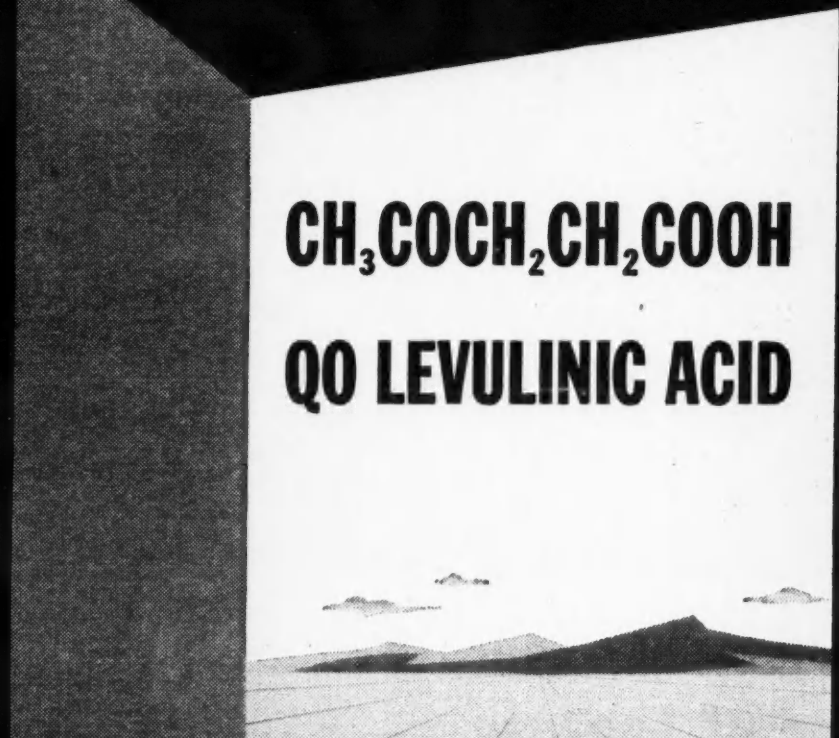
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., dlvd E lb. .18 - —
tanks, dlvd E lb. .14½- —
Methylamyl alcohol (see Methyl isobutyl carbinol).
Methylamyl ketone, dms., works lb. 1.03 - —
Methyl anthranilate, cns. lb. 2.35 2.65
Methyl benzoate, cns., dms. lb. .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 .69

NEW UNUSUAL RAW MATERIAL

$CH_3COCH_2CH_2COOH$

QO LEVULINIC ACID



POLYFUNCTIONAL:
Acts as a carboxylic acid and as a ketone
Has many active hydrogen atoms
Cyclizes to heterocyclic forms

Levulinic acid is a stimulating chemical with which to work because of the unusual variety of its reactions. It reacts as a carboxylic acid, and it functions as a ketone. Notice, too, that the 1,4 stereochemical relationship of its functional group frequently leads to cyclization, forming heterocycles, an open door to new products for you. Condensation reactions of its methylene groups invite further investigation.

Levulinic acid can be converted in good yield to: gamma-valerolactone by hydrogenation; succinic acid by catalytic oxidation; 5-methyl-2-pyrrolidone by reductive amination; calcium levulinate by neutralization; alpha-angelica lactone by dehydration.

QO Levulinic acid is now available from our pilot plant in cans and drums. Drum carload quantities can be supplied. The manufacturing process is suitable for full scale production on a commercial unit.

Write for our new Bulletin 301 on QO Levulinic acid and a sample.

The Quaker Oats Company
CHEMICALS DEPARTMENT

341M The Merchandise Mart, Chicago 54, Illinois
Room 541M, 120 Wall Street, New York 5, New York
Room 441M, 48 S.E. Hawthorne Blvd., Portland 14, Oregon
Room 6151M, 815 Superior Ave., Cleveland 14, Ohio

Methyl cellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works	lb.	.88	—
50-lb. bgs., 2,000-lb. lots and more, same basis	lb.	.89	—
50-lb. bgs., smaller lots, frt. alld. on 100 lbs.	lb.	1.08	—
Methyl cellulose, standard vis. (15-400 cps.), 50-lb. bgs., c.l., frt. alld	lb.	.69	—
Methyl cellulose, standard vis. (15-400 cps.), 50-lb. bgs., 2,000-lb. lots and more, same basis	lb.	.76	—
50-lb. bgs., smaller lots, frt. alld. on 100-lbs	lb.	.79	.89
Methyl chloride, indust., cyls., frt. equald	lb.	.22¼-	—
tanks, multi-unit, same basis	lb.	.16¼-	—
tanks, single unit, same basis	lb.	.12¾-	—
Refrigerator mfrs., cyls., dlvd	lb.	.48¾-	—
other consumers or service men, cyls., dlvd	lb.	.67¾-	—
Methyl chloroform (see 1,1,1-trichloroethane).			
Methyl cinnamate	lb.	1.55	1.80
Methyl ethyl ketone, dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	.12½-	—
2-Methyl-5-ethyl pyridine, dms., c.l., works	lb.	.45	—
l.c.l., works	lb.	.45¾-	—
tanks, works	lb.	.43	—
Methyl formate, refd., dms	lb.	.35	.40
Tech., non-ret. dms., any quantity, works	lb.	.10	—
Methyl heptin carbonate, bots	lb.	31.00	-42.00
Methyl p-hydroxybenzoate, fib. dms.	lb.	1.90	- 2.00
Methyl ionone, standard, cns., dms.	lb.	4.85	—
Methyl isobutyl carbinol, dms., c.l., dlvd	lb.	.17	—
dms., l.c.l., dlvd	lb.	.18	—
tanks, dlvd	lb.	.14½-	—
Methyl isobutyl ketone, dms., c.l., dlvd	lb.	.17	—
dms., l.c.l., dlvd	lb.	.18	—
tanks, dlvd	lb.	.14½-	—
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va	lb.	.31	—
dms., smaller lots, same basis	lb.	.31½-	—
tanks, same basis	lb.	.29	—
Methyl naphthyl ketone, cryst., cns.	lb.	3.00	- 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).			
Methyl roseaniline chloride, NF., 5-lb. fib. dms	lb.	6.90	—
Methyl salicylate, USP cns., 500-lb. lots	lb.	.62	—
Methyl testosterone, USP, 100-gram bots	gram	.68	—
Methyl violet toner, molybdated, PMA, bbls., dlvd. N. of Tenn. and N. C., E of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb.	2.80	—
Methyl violet toner, tungstated, PTMA, bbls., same basis	lb.	4.35	—
Methyl violet toner dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1½c.), Miss. N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt equald. with Chicago.			
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted	lb.	3.25	—
Methylene chloride, tech., dms., c.l., t.l., straight or mixed works	lb.	.14	—
Methylene chloride, tech., dms., l.c.l., l.t.l., works	lb.	.16¾-	—
tanks, 4,000-gal. min., tank trucks maximum load limit, works	lb.	.12½-	—
tank trucks, 1,000-gal. min., works	lb.	.13½-	—
b-Methylnaphthalene, 32°C., m.p., dms., works	lb.	.90	—
Methylpentanediol (see Hexylene glycol).			
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).			
Methylthionine chloride (see Methylene blue).			
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works	lb.	.04	—
roofing, 20 to 80 mesh, works	lb.	.03	—
wet-grd., biotite, bgs., c.l., works, frt. alld. E	lb.	.06½-	—
bgc., l.c.l., ex-whse.	lb.	.07¼-	—
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E	lb.	.08¼-	—
bgs., l.c.l. ex-whse or frt. alld. E	lb.	.09	—
rubber, bgs., c.l., works, frt. alld. E	lb.	.08	—
bgs., l.c.l., ex-whse. or frt. alld. E	lb.	.08¾-	—
wet-grd., wallpaper, bgs., c.l., works, frt. alld. E	lb.	.08¾-	—
bgs., ex-whse. or frt. alld. E	lb.	.09	—
white, 5-10 microns, bgs., c.l., works, frt. alld. E	lb.	.08¼-	—
white, 5-10 micron, bgs., l.c.l., ex-whse. or frt. alld. E	lb.	.09	—
Mica, wet-grd. W. of Miss ½c. higher; W. of Rockies 1c higher.			
Microcrystalline wax, petroleum, coating grades, tankcars, works	lb.	.10	.11
laminating grades, tankcars, works	lb.	.11	.12
Mineral black, bgs., works	lb.	.0160	.0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy	gal.	.62	—
tankcars, refy.	gal.	.46	—
65-75 vis., non-ret. dms., c.l., same basis	gal.	.62	—
non-ret. dms., l.c.l., same basis	gal.	.67	—
tankcars, refy	gal.	.46	—
80-90 vis., non-ret. dms., c.l., same basis	gal.	.63	—
non-ret. dms., l.c.l., same basis	gal.	.68	—
tankcars, refy.	gal.	.47	—
133-138 vis., non-ret. dms., c.l., same basis	gal.	.69	—
non-ret. dms., l.c.l., same basis	gal.	.74	—
tankcars, refy	gal.	.53	—
145-155 vis., non-ret. dms., c.l., same basis	gal.	.75	—
non-ret. dms., l.c.l., same basis	gal.	.80	—
tankcars, refy.	gal.	.59	—
USP, 180-190 vis., non-ret. dms., c.l., same basis	gal.	.77	—
non-ret. dms., l.c.l., same basis	gal.	.82	—
tankcars, refy.	gal.	.61	—
200-210 vis., non-ret. dms., l.c.l., f.o.b., New York	gal.	.84	—
non-ret. dms., l.c.l., same basis	gal.	.89	—
tankcars, refy.	gal.	.63	—
Mineral orange, American, bbls., l.c.l., works	lb.	.19¼-	—
Mineral spirits, petroleum, odorless, tanks, refy., Watson, Calif.	gal.	.25	—
tanks, Borger, Tex.	gal.	.25	—
Houston, Tex.	gal.	.25	—
Philadelphia	gal.	.32	—
Newark	gal.	.29	—
New York, dlvd.	gal.	.30½-	—
Wood River, Ill.	gal.	.2725-	—
tankwagon, New Jersey, dlvd.	gal.	.37½-	—
tankwagon, New York, dlvd.	gal.	.38½-	—
reg., tanks, Calif., ex tax San Francisco	gal.	.169	—
tanks, east coast New Jersey, New York	gal.	.18	—
tanks, group 3	gal.	.12875-	—
tankwagon Boston	gal.	.20	—
Buffalo	gal.	.20½-	—
Chicago	gal.	.289	—
Cleveland	gal.	.23½-	—
Newark	gal.	.19	—
New York	gal.	.19	—
Philadelphia	gal.	.19¼-	—
Pittsburgh	gal.	.19	—
Providence	gal.	.20½-	—
Mirbane oil (see Nitrobenzene).			
MNPT maroon toner, kgs., c.l., works	lb.	6.30	—
Molasses, blackstrap, feed grade, tanks, New Orleans	gal.	.18½-	.19
tanks, New York	gal.	.25	—
Molybdated orange, bbls	lb.	.48	—
Molybdenum metal, powd., 80 or 200 mesh, ctns., works	kilo.	7.84	—
325 mesh, ctns., works	kilo.	9.13	—
Molybdenum trioxide, pure, dms., works	lb.	1.15	—
Tech., dms., works, basis Mo content	lb.	1.39	—
Molybdic acid, 85%, dms., works	lb.	1.20	—
Monobutylamine, dms., c.l., E. of Rockies	lb.	.55½-	—
dms., l.c.l., same basis	lb.	.56½-	—
tanks, same basis	lb.	.53	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E	lb.	.10	—
dms., l.c.l., same basis	lb.	.11	—
tanks, same basis	lb.	.08½-	—
Monoethanolamine, dms., c.l., dlvd. E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.28½-	—
tanks, same basis	lb.	.25	—
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).			
Monoethylamine, 70% aqueous solution, 100% basis, dms., c.l., dlvd. E	lb.	.38½-	—
dms., l.c.l., dlvd. E	lb.	.40	—
tanks, dlvd. E	lb.	.35	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).			
Monoisopropanolamine, dms., c.l., dlvd. E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.28½-	—
tanks, same basis	lb.	.25	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½-	—
dms., l.c.l., same basis	lb.	.34½-	—
tanks, same basis	lb.	.31	—
Monomethylamine, 30 35% soln., dms., c.l., frt equald, 100% basis	lb.	.40	—
dms., l.c.l., frt. equald, 100% basis	lb.	.40½-	—
tanks, frt. equald, 100% basis.	lb.	.31	—
40% soln., dms., frt. equald, 100% basis	lb.	.37	—
dms., l.c.l., frt. equald, 100% basis	lb.	.37½-	—
tanks, frt. equald, 100% basis.	lb.	.31	—
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld	lb.	3.05	—
dms., 100-lb. lots, same basis	lb.	3.25	—
Monosodium glutamate, dms., c.l.	lb.	1.15	—
dms., l.c.l	lb.	1.23	1.27
Monosodium phosphate, (see Sodium phosphate, monobasic).			
Montan wax, dom., refd., bgs	lb.	.29	.30
Imp., crude, Bohemian, bgs	lb.	.26	.28
German, bgs	lb.	.33	Nom.
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).			
Morphine, cns	oz.	12.40	-12.60
Morphine acetate, anhyd., cns	oz.	9.95	-10.00
Morphine hydrobromide, cns	oz.	9.90	- 9.95

by cooperative research **QUALITY CHEMICALS**

OVER TWENTY YEARS EXPERIENCE IN RESEARCH and production of bromine, magnesia, chloride and calcium chemicals, and recent expansions in capacities and improvements in processes provide facilities for customers requiring basic supplies of industrial, pharmaceutical, agricultural, and rare earths chemicals. Inquire about our program of cooperative research on your problems.

Aluminum Bromide Anhydrous. Technical grade, dark colored product suitable for most manufacturing uses. Highly reactive catalyst, many uses in organic synthesis especially in isomerization, bromination and halogen exchange reactions. Available as solid or lump.

Ammonium Bromide N.F. X. A white powder, very pure, complies with all the requirements of the National Formulary. Commonly used as sedative in pharmaceutical preparations. Also in photography, textile finishing and as fire retardant for fabrics.

Bromine, Dry. A powerful oxidizing and brominating agent used in manufacture of dyes, pharmaceuticals. Many applications in organic synthesis. Low moisture content of 30 ppm permits use in nickel and monel equipment. Very irritating to skin, eyes.

Chlorobromomethane "CB". A specially prepared pure, noncorrosive fire extinguishing fluid. Now finding increased use in factories, warehouses, homes. Clear, colorless, 2 degrees C. boiling range; complies with current military specifications. Used as solvent and in organic synthesis.

Cyclopentyl Bromide. A clear, colorless liquid with an aromatic odor. Specially prepared for use in organic synthesis, particularly for introduction of the cyclopentyl radical. Many potential uses in manufacture of pharmaceuticals. Purified grade, 2 degrees C. boiling range.

1, 3-Dibromo-5, 5-dimethylhydantoin. $C_5H_6Br_2O_2N_2$. A bromine carrier and oxidizing agent. Useful in synthesis for side chain bromination and bromination of allylic carbon atoms. A fine stable powder with a minimum active bromine content of 54%.

β - Diethylaminoethyl Chloride Hydrochloride. $(CH_3CH_2)_2NCH_2CH_2Cl \cdot HCl$ (DEC). A granular solid. Specially suited for use as an intermediate in organic chemical manufacture, including antispasmodic agents and other pharmaceuticals.

β - Dimethylaminoethyl Chloride Hydrochloride. (DMC). $(CH_3)_2NCH_2CH_2Cl \cdot HCl$. A granular solid. Specially prepared for use in manufacture of antihistaminics and other pharmaceuticals. Other potential uses in organic synthesis. Relatively nontoxic in hydrochloride form.

β - Dimethylaminoisopropyl Chloride Hydrochloride. $(CH_3)_2NCH_2CHClCH_3 \cdot HCl$. (DMIC). An organic intermediate similar in appearance and properties to DEC and DMC. Specially prepared for manufacture of analgesics and other pharmaceuticals. Other potential uses in organic synthesis.

γ - Diethylaminopropyl Chloride Hydrochloride. $(C_2H_5)_2NCH_2CH_2CH_2 \cdot HCl$ (DEPC). A light tan to white crystalline hygroscopic solid. Used in pharmaceutical manufacture, especially for introduction of the diethylaminopropyl radical.

γ - Dimethylaminopropyl Chloride Hydrochloride. $(CH_3)_2NCH_2CH_2CH_2Cl \cdot HCl$ (DMPC). A white powder of singular purity. A versatile intermediate for pharmaceutical and organic syntheses, available exclusively from Michigan Chemical.

Ethyl Bromide. A clear, colorless, volatile liquid, specially prepared for use as an intermediate in organic synthesis. Practically free from impurities; has a narrow boiling range. Used in manufacture of dyes, perfumes and pharmaceuticals.

Hydrobromic Acid. A clear, colorless or light amber colored fuming liquid. Used for manufacture of inorganic metal bromides, aliphatic bromides, pharmaceuticals, dyes and intermediates. 48% acid and other strengths.

Magnesium Carbonate, Basic, Technical. Fine, uniform white powder, 325 mesh, bulk density 5.5 pounds per cubic foot. Very reactive. Used for rubber compounding, printing inks, paints, varnishes. Anticaking agent for table salt; conditioning or bulking material for powder formulations.

Magnesium Hydroxide. Fine, white powder, typical assay 96.3%, low in moisture, iron, alumina, silica. Technical and NF X grades. Special bulk densities available in NF grade. Convenient material for manufacture of light magnesias, other magnesium compounds.

Magnesium Oxides. Six principal grades of Michigan magnesium oxide with wide range of desirable physical and chemical characteristics covering principal uses of MgO, including rubber compounding, rayon manufacture, ceramics, glass, refractories, insulation.

Methyl Bromide. A heavy, colorless liquid, vaporizing at 40 degrees F., nonflammable and poisonous. Highly penetrating and insecticidally effective fumigant. Also used in organic synthesis for the introduction of the methyl group, especially in preparation of certain pharmaceutical chemicals.

Monobromobenzene. Clear, colorless, heavy liquid. Specially prepared for use as an intermediate in preparation of organic compounds. For introduction of the phenyl radical and in Grignard-type reactions. A pure material with a 2 degrees C. boiling range; specific gravity 1.495.

Phosphorous Tribromide. Brominating agent. A liquid, boiling point 173 degrees C., which fumes in contact with moist air. Used in synthetic work to convert alcohols to bromides, and acids to acyl bromides. Specially useful in preparation of bromides from alcohols without rearrangement.

Potassium Bromate, Granular. A fine, white, granular or crystalline material 99.5% pure. Decomposes at 370 degrees C. with evolution of oxygen. Strong oxidizing agent, used as an analytical reagent. Neutralizer in permanent wave compounds.

Potassium Bromate, Powder. A fine uniform powder with same properties as Granular. Available with added magnesium carbonate conditioning agent when specified. Suitable for use as an aging additive for flour.

Potassium Bromide, N.F. X. Pure, white granular powder. Low in chloride, passes all N.F. requirements. Widely used in the preparation of photographic emulsions, and in lithograhy. One of the most important sedatives. Available in several granulations.

Sodium Bromide, U.S.P. XV. Pure, white crystaline powder or granules. Passes all requirements of the U.S. Pharmacopoeia. High assay; low in chloride. An important nerve sedative. Used in manufacture of other bromides. Contains about 77.5% bromine.

Tetrabromophthalic Anhydride. $C_8Br_4O_3$. High molecular weight phthalic anhydride having a bromine content of 66%. Will undergo most of the reactions of phthalic anhydride. Pale yellow crystalline compound melting point minimum 265°C.

Trimethylene Chlorobromide. Clear, colorless liquid used in manufacture of anesthetic grade cyclopropane. Greater reactivity of bromine atom makes trimethylene chlorobromide specially useful also in preparation of gamma chloro compounds. Boiling range 2 degrees C. maximum.

Zinc Bromide Solution, Optical Grade. Clear, colorless solution, about 80% $ZnBr_2$. Used in laboratories dealing with radioactive chemicals as a radiation viewing shield; the most satisfactory material. Meets all chemical and optical specifications of Argonne National Laboratory.

Also Manufacturer of Rare Earth Compounds and Metals, Pestmaster Insecticides, Pestmaster* Methyl Bromide Fumigants and Dustmaster* Road Chemicals.*

MICHIGAN CHEMICAL CORPORATION

526 Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, New York

*Reg. U.S. Pat. Off. C-56-10

BASIC MANUFACTURER OF INDUSTRIAL, PHARMACEUTICAL AND AGRICULTURAL CHEMICALS

Morphine hydrochloride, NF, cns.	oz	9.90	9.95
Morphine sulfate, USP, cns	oz	9.90	10.05
Morpholine, dms., c.l., dlvd. E	lb.	.55¼	—
dms., l.c.l., dlvd E	lb.	.56¼	—
tanks, dlvd. E	lb.	.52¾	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib. dms., 100-lb lots	lb.	4.45	5.15
Syn., ambrette, cns. 25-lb. lots	lb.	5.05	5.65
cns., 5-lb. lots	lb.	5.20	5.50
Ketone, fib. dms., 100-lb. lots	lb	4.70	5.30
cns., 25-lb lots	lb	5.35	—
cns., 5-lb. lots	lb	5.45	—
xylol, fib dms., 100-lb. lots	lb	1.40	—
cns., 25-lb lots	lb	1.45	—
cns., 5-lb lots	lb	1.50	—
Mustard seed, Danish, yellow, bgs.	lb.	.10	—
Dutch, bgs	lb.	.10½	—
English, yellow, bgs	lb.	.11	—
Montana, bgs., No. 1	lb.	.09½	—
Mustard oil, syn., bots	lb.	1.60	1.85
Mustard seed oil, nat. dms.	lb.	.17½	Nom
Myristic acid, dms	lb.	.26	.30
tanks	lb.	.25⅝	—
Myrobalans, Bombay	ton.	55.00	-56.00
J-1, genuine, bgs., ex dock	ton.	60.00	-62.00
J-1, crushed, bgs., ex dock	ton.	75.00	-76.00
Myrobalans extract, Indian solid, 55% tannin, bgs., ex dock, plus duty	lb.	.10½	.10¾
Myrrh gum, cs	lb.	.50	.55

N

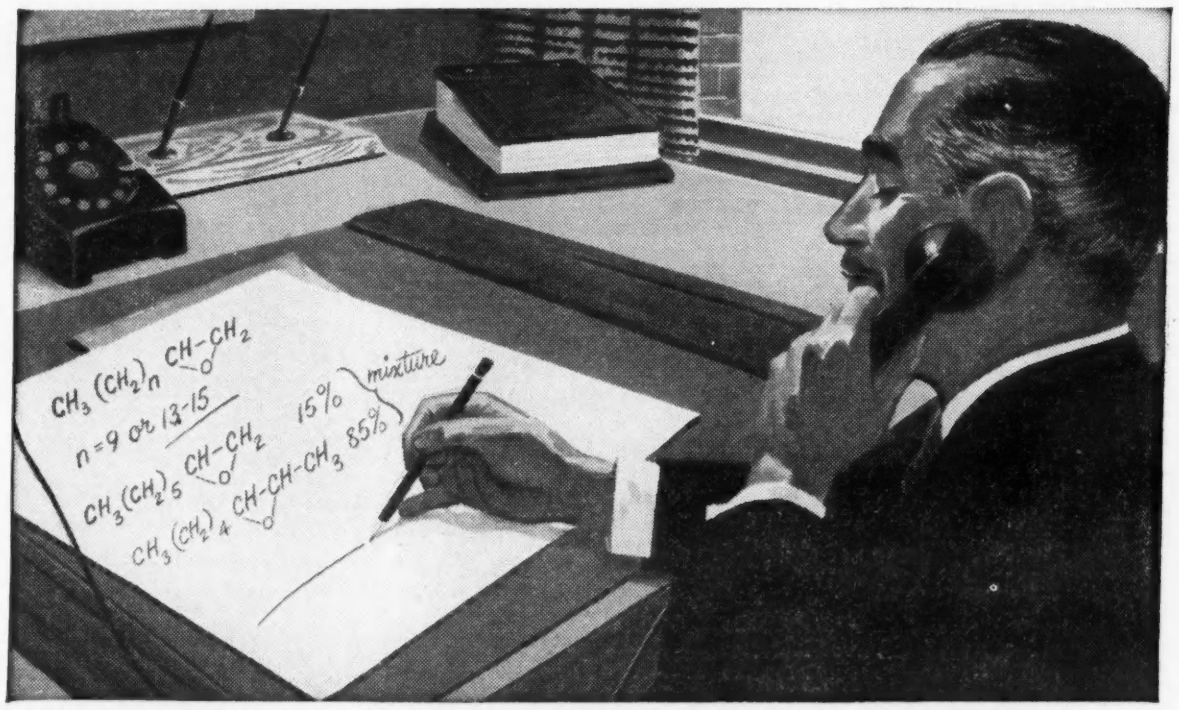
Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's, 140°F, flash, tanks, east coast, New Jersey and New York	gal.	.18	—
tanks, group 3	gal.	.15	.15½
tankwagon, Newark	gal.	.19	—
New York	gal.	.19	—
Philadelphia	gal.	.19½	—
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles	gal.	.174	—
Portland, Ore.	gal.	.18	—
San Francisco	gal.	.179	—
Seattle, Wash.	gal.	.18	—
east coast, New Jersey and New York group 3	gal.	.19 .13875	—
tankwagon, Boston	gal.	.21½	—
Chicago	gal.	.299	—
Cleveland	gal.	.24½	—
Newark	gal.	.20½	—
New York	gal.	.20½	—
Philadelphia	gal.	.21½	—
Pittsburgh	gal.	.20	—
Naphthalene, crude, com., 74°, tanks, frt. equald	lb.	.06¼	—
78°, bgs., c.l., same basis	lb.	.07½	.08
bgs., l.c.l., same basis	lb.	.07¾	.08¼
tanks, same basis	lb.	.07	—
Imp., 78°, bgs., large lots	lb.	.05	Nom.
Naphthalene, refd., indust., chipped, crushed, bgs., frt. alld	lb.	.12½	—
tanks, same basis	lb.	.11¾	—
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis	lb.	.15½	—
cs, 50 lbs., c.l., same basis.	lb.	.15¾	—
1-lb. pkgs., c.l., same basis	lb.	.18½	—
1-Naphthol-4 sulfonic acid (see Neille and Winther's acid).			
1-Naphthol-5-sulfonic acid (see L acid).			
1-Naphthol-5-sulfonic 8-amino acid (see S acid).			
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid).			
Naphthol sulfonic mixed acid (see Cleve5s acid).			
1-Naphthylamine-5-sulfonic acid (see Laurents acid).			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Napthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
a-Naphthol bbls., frt. alld	lb.	1.00	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.33	—
bbls., l.c.l., works	lb.	.35	—
Naphthol ITR red toner, bbls., works	lb.	5.50	—
a-Naphthylamine, bbls., frt. alld	lb.	.50	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60	—
Naringin, fib. dms.	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms	lb.	.30	.33
20° cold test, dms.	lb.	.29	.32
30° cold test, dms	lb.	.28	.31
Neocinchophen, USP, dms., frt. adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity	gram.	.45	—
fib. dms., 100-999-gram lots, basis activity	gram.	.50	—
Neroli oil, NF, French bots	lb.	575.00	—
Nerolin, cns.	lb.	2.45	2.65
Nevile and Winther's acid, dms., frt. alld	lb.	1.30	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd	lb.	.73	.80
Nickel carbonate, bbls., dlvd	lb.	.80¾	.87¾
Nickel chloride, bbls., dlvd.	lb.	.40½	.48½
Nickel formate, bbls., ton lots, frt. alld	lb.	.72	.73
Nickel metal electro cathodes, cs., works	lb.	.74	—
Nickel nitrate, bbls., works	lb.	.32½	.33½
Nickel oxide, black, bbls.	lb.	.84	—
Green, bbls	lb.	.85	—
Nickel sulfate, bgs., c.l., dlvd.	lb.	.32½	—
bgs., l.c.l., dlvd.	lb.	.33½	.40½
Nicotinamide USP, dms., frt. adjusted kilo		9.50	9.80
Nicotinamide hydrochloride dms., frt. adjusted kilo		9.50	9.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld	lb.	1.20	—
40%, manufacturers, 500-lb. dms., frt alld	lb.	1.05	—
Nicotinic acid USP, dms., dlvd. kilo		8.00	8.30
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.11½	.12
Nikethamide, cbys.	lb.	7.50	—
Nitric acid, 36° Be., cbys., c.l., works, E 100 lbs		5.75	—
cbys., l.c.l., works, E 100 lbs		6.05	6.85
38° Be. cbys., c.l., works, E. 100 lbs		6.25	—
cbys., l.c.l., works, E 100 lbs		6.55	7.35
40° Be., cbys., c.l., works, E. 100 lbs.		6.75	—
cbys., l.c.l., works, E 100 lbs.		7.05	7.85
42° Be cbys., c.l., works, E. 100 lbs.		7.25	—
cbys., l.c.l., works, E 100 lbs.		7.55	8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs.		3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs.		4.90	—
CP, NF, consumer, cbys., extra, cbys., extra, l.c.l., same basis, c.l., works	lb.	.18½	—
	lb.	.20	.20½
5-pt. bots, extra, cs., c.l., same basis	lb.	.22½	—
5-lb. bots., extra, cs., l.c.l., same basis	lb.	.24	.25
m-Nitroaniline, cryst., dms., frt. alld	lb.	1.15	—
Paste, dms., frt. alld., 100% basis.	lb.	1.10	—
o-Nitroaniline, flaked, dms., t.l., frt. alld	lb.	.49	—
dms., l.t.l., frt. alld.	lb.	.51	—
o-Nitroaniline orange toner, kegs,	lb.	1.35	—
p-Nitroaniline, dms., frt. alld	lb.	.445	—
Nitrobenzene, dbl. dist., dms., c.l., frt. alld	lb.	.14	—
dms., l.c.l., frt. alld.	lb.	.15	—
tanks, frt. alld.	lb.	.12	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.72	—
dms., l.c.l., works	lb.	.73	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, seconds, bbls., c.l., works	lb.	.34	—
bbls., l.c.l., same basis	lb.	.35	.37
18-20 cps., bbls., c.l., same basis.	lb.	.36	—
bbls., l.c.l., same basis	lb.	.37	.39
Ester-soluble, 250-400, 600-1,000 seconds, bbls., l.c.l., same basis	lb.	.40	.42
Spirit-soluble, 30-35 cps., ¼, ½, seconds, bbls., c.l., same basis	lb.	.41	—
bbls., l.c.l., same basis	lb.	.42	.44
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.40	—
bbls., l.c.l., same basis	lb.	.41	.43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l., frt. alld	lb.	.15	—
dms., l.c.l. same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Nitrochlorobenzene, dms.	lb.	.26	.27
2-Nitro-4-chlorophenol. dms.	lb.	.75	—
Nitroethane, dms., c.l., dlvd. E	lb.	.24	—
dms., l.c.l., dlvd. E	lb.	.24¾	—
tanks, dlvd. E.	lb.	.22½	—
Nitroethane prices West of Rockies are 1c. higher.			
Nitrogen solutions, tanks, frt. equald	unit.	1.20	—
Nitrogenous process tankage, bulk, works	unit-ton.	3.00	4.00
Nitrogenous sewage sludge, bulk, works,	unit-ton.	2.95+	.50
Nitromethane, dms. c.l., dlvd. E	lb.	.24	—
dms., l.c.l., dlvd. E	lb.	.24¾	—
tanks, dlvd. E.	lb.	.22½	—
Nitromethane prices West of Rockies are 1c. higher.			
a-Nitronaphthalene, bbls., frt. alld.	lb.	.41	—
o-Nitrophenol, dms, works, frt. equald	lb.	.94	—
p-Nitrophenol, dms., c.l., frt. alld.	lb.	.51	—
dms., l.c.l., frt. alld	lb.	.53	—
1-Nitropropane and 2-nitropropane, dms., c.l., frt. alld. E	lb.	.22½	—
dms., l.c.l., same basis	lb.	.23¼	—
tanks, same basis	lb.	.21	—
Nitropropane prices west of Rockies are 1c. per lb. higher.			
o-Nitrotoluene, dms., c.l., frt. alld.	lb.	.10	—
dms., l.c.l., frt. alld	lb.	.11	—
tanks, frt. alld	lb.	.09	—
p-Nitrotoluene, dms., works	lb.	.33	—
m-Nitro-p-toluidine, dms	lb.	1.59	—
Nitrous ether, conc., bots., 100-lb. lots	lb.	1.28	1.35
Nonyl phenol, dms. c.l., frt. alld.	lb.	.26½	—
dms., l.c.l., frt. alld	lb.	.27½	—
tanks, frt. alld	lb.	.24½	—
Nutgalls, Aleppo, bgs	lb.	.35	.38
Chinese, bgs	lb.	No prices.	
Nutmeg, East Indian, bgs.	lb.	2.12	—
West Indian, bgs.	lb.	2.00	—
Nutmeg oil, USP, dist., East Indian, cns., dms	lb.	14.50	-15.00
USP, dist., West Indian, cns., dms.	lb.	14.50	-15.00
Nux vomica, bls	lb.	.10	.12
Powd., bbls., bxs	lb.	.15	.17

O

Ocher (see Iron oxide yellow, nat.).			
Ocotea cymbarum oil, dms	lb.	.55	—
Octane, indust., tanks, Bayonne, N. J	gal.	.19	—
tanks, Baytown, Tex	gal.	.15¾	—
Borger, Tex	gal.	.15¾	—



Where can you use Olefin Epoxides, now available in development quantities?

Perhaps we can offer a few suggestions. New Olefin Epoxides now available in development quantities from Becco are showing great promise in applications, such as:

1. general solvents
2. solvents and reactive diluents for epoxy resins
3. intermediates in manufacture of: perfumeries, cosmetics, surfactants, plastics, lubricants
4. acid scavengers
5. corrosion inhibitors
6. stabilizers for chlorinated compounds
7. monomers
8. organic synthesis intermediates

These epoxidized Olefins, developed by Becco as a result of extensive research in epoxidation reactions, combine variable length hydrocarbon structures with reactive epoxy groups and undergo reactions such as polymerization, isomerization, reduction and ring-opening with a variety of active hydrogen compounds.

The compounds offered are high assay epoxides:

	F.P.°C	B.P.°C	Density at 25°C	Solubility
OCTYLENE OXIDE mixed 1,2-and 2,3-epoxy-n-octanes	<−50	76-78 (45mm)	0.830	very slightly soluble in water, soluble in hydrocarbons and other organic solvents.
DODECENE OXIDE 1,2-epoxy-n-dodecane	ca −10	97-98 (3.5mm)	0.836	Insoluble in water, soluble in hydrocarbons and other organic solvents.
C_{16}—C_{18} OLEFIN OXIDE mixed 1,2-epoxy-n-hexadecane and -n-octadecane	ca 15	>110 (0.5mm)	0.842	Insoluble in water, soluble in hydrocarbons and other organic solvents.

If you are interested in possible applications of these epoxy compounds, we shall be glad to supply experimental quantities and technical assistance. Why not begin by writing for your free copies of Bulletins 72, 73, and 74 — there is no obligation.

BECCO CHEMICAL DIVISION
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

BUFFALO • BOSTON • CHARLOTTE, N.C. • CHICAGO
NEW YORK • PHILADELPHIA • VANCOUVER, WASH.

Progress in Peroxygens ®BECCO

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

FMC CHEMICALS INCLUDE: BECCO Peroxygen Chemicals • WESTVACO Phosphates, Barium and Magnesium Chemicals • WESTVACO Alkalis, Chlorinated Chemicals and Carbon Bisulfide • NIAGARA Insecticides, Fungicides and Industrial Sulphur • OHIO-APEX Plasticizers and Chemicals • FAIRFIELD Pesticide Compounds and Organic Chemicals

1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .37 - —
dms., t.c.l., dlvd lb. .39 - —
tanks, dlvd. lb. .34½ - —
Octyl alcohol, perfumer's grade, bots lb. 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .24 - —
bgs., t.c.l., works lb. .24½ - —
tanks, works lb. .23 —
Octyl phenol in dms., 1lc. higher.

Oils

Oil quotations, formerly grouped under one heading, are now listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms lb. .19 - 19½
tanks lb. .17½ —
Oleic acid, dbl.-dist. (white), dms. lb. .20¾ - .23¼
tanks lb. .18¼ - —
Single-dist., dms lb. .19½ - .22
tanks lb. .17 - —
Oleo oil, extra, dms. lb. .19 - .19½
Oleostearine, dms. lb. .13¾ - .14
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb 20 Nom
Tears, cs lb 22 30
Olibanum oil, bots lb 5.50 7.65
Extra fine, bots. lb. 8.00 9.50
Olive oil, edible, Spanish, dms., duty-paid gal. 3.00 Nom.
Edible, Tunisian, dms., same basis gal. 2.75 - 2.90
Olivine, crude, works ton. 12.00 —
20 mesh, works ton. 15.00 —
100 mesh, works ton. 20.00 —
Opium, USP, cns oz. 19.20 -19.45
USP, gran, cns. oz. 21.65 -21.90
powd., cns oz. 21.65 21.90
Orange oil, expressed, USP, Brazilian, cns, dms lb No stocks
Expressed, USP, Calif., cns., dms. lb. .75 1.75
Florida, cns., dms. lb. .52 - .65
Messina, cns lb 3.85 5.85
West Indian, cns., dms lb 2.50 3.65
Sesquiterpeneless, bots lb 65.00 120.00
Sweet, dist., cns., dms lb 45 80
Orange peel, bitter, Haitian, bls lb .14 .16
Sweet, bls lb .16 .18

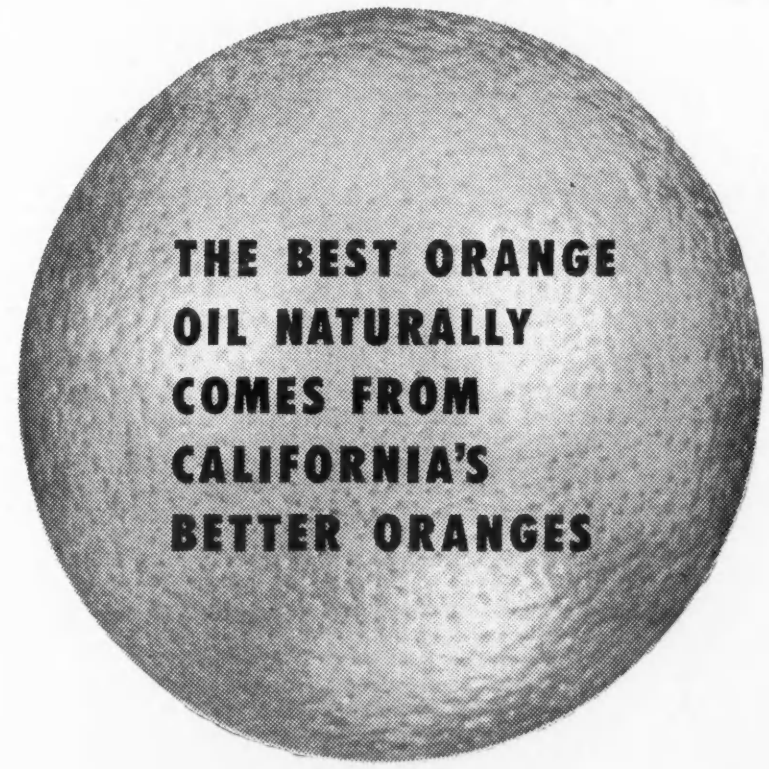
Orange Pigments

Orange pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb 2.00 —
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb .68 - —
Verona, bls lb 35 - .40
Orthoanisidine (see o-Anisidine).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Osage orange, cryst., No. 1, bbls, l.c.l lb. .40 - —
Extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots gram 3.00 4.00
Ouricury wax, refd., pure lb. .73 - .75
crude lb. .66 - .68
Oxalic acid, bbls., c.l., works lb. .16½ —
bbls., 10,000-lb. lots, works lb. .16¾ - —
bbls., smaller lots, works lb. .17¾ - —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 1.17
Oxyquinolin sulfate, cns. 100-lb. lots, works lb 4.73 5.00
cns., smaller lots, works lb. 4.92 5.17

P

Palm oil, clarif., dms lb. .15 - .16
Palm oil, acids, dist., dms lb. .16¼ - .19¼
tanks lb. 13¾ - .14¼
Palmarosa oil, cns. lb. 6.50 —
Papain, African, bots lb. 8.50 - —
Ceylon, bots. lb. 7.50 - 8.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Rumanian, bgs. lb. .34 - —
Spanish, bgs. lb. .44 - .58
Yugoslavian, bgs. lb. .39 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Para-aminosalicylic acid (see p-Aminosalicylic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.15 - —
Chlorinated, kgs. lb. 1.30 - —
Paraffin, crude, scale white, 123°-127°F. ASTM, tanks, refy. lb. .0710- —
Fully refd., 122°-124°F, ASTM, tanks, refy lb. .0815- —
125°-127° F. ASTM, tanks, refy. lb. .0815- —
130°-132°F, ASTM, tanks, refy. lb. .0815- —
Paraffin, fully refd., 132°-134° F, ASTM, tanks, refy lb. .0815- —
135°-137°F, ASTM, tanks, refy. lb. .0815- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde 91% flake, bgs., c.l., frt alld lb. .11¼ - —
bgs., t.c.l., frt. alld lb. .13¼ - 14¼
91%, powd., bgs. c.l., ex whse lb .167 - —
bgs., l.c.l., ex whse lb. .182 - —
USP X, fib dms., c.l., lb. .19 - —
fib dms., 1,000-lb. lots lb .20 - —
fib dms., smaller lots lb. .21½ - —
Paraldehyde tech., 98% 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal dms., l.c.l. dlvd lb. .15 - —
tanks, dlvd lb. .11½ - —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, spray powder, 15%, dealers, bgs., dms. frt. alld. lb. .56 .53
Tech., dms., c.l., t.l., works lb. 1.33½ - —
dms., l.c.l., works lb. 1.51 —
Paratoluenesulpnonamide (see p-Toluenesulfonamide).
Paris green, dealers, dms., c.l., frt. alld lb. .44 - .47
dms., t.c.l., same basis lb. .45 - .48
Passion flower herb, bls. lb 25 - —
Patchouli oil, dms. lb. 6.25 - 6.75
Peach kernel oil, USP, (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd., N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb .90 - —
Peacock blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Peanut meal, 45%, old process, bgs. mills ton. 46.50- —
Peanut oil, crude, tanks, f.o.b. mills lb. .13⅞ - —
Refd., dms. lb. .19½ - .20
tanks lb. .17½ - —
Pectin, NF, citrus, dom., powd., bbls. lb 2.05 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.35 - —
Imp., Danish, ex whse. lb. 1.28 - —
Penicillin, potassium, cryst., bulk 1,000,000 units .0675- .0700
Penicillin, procaine, bulk 1,000,000 units. .0675 .0700
Penicillin, sodium, bulk 1,000,000 units. .0775- .0800
Pennyroyal oil, USP, imported, cns. lb. 2.75 3.50
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .22 - —
bgs., t.c.l., same basis lb. .23½ - .30
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech, bgs., c.l., works lb .32 - —
bgs., t.c.l., works lb. .33 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks Tex refy. gal. .14 - —
Pepper, black, Malabar, spot bgs. lb. .26½ - —
Red, Gondar, spot, bgs lb. .32 - —
Japanese, hontaka, bgs lb. .36 - —
Japanese, birdseyes, bgs., new crop lb No prices.
Mombasa, bgs., shipt. lb. .65 - —
Nigerian, bgs. lb. .36 - —
Turkish, bgs. lb. No prices.
White, bgs. lb. .34½ - —
Peppermint leaves, dom., USP, bls., dms lb. 70 - .75
Imp., USP, bls. lb. .83 - —



OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers

Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St.
New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave.
New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Peppermint Oil—Pinetar Oil

Peppermint oil, nat., dms.	lb.	4.75	6.50
Redist., USP, dms.	lb.	5.25	6.75
Perchloroethylene, dms., c.l., or t.l., dlvd	lb.	.13½	—
dms., l.c.l., dlvd	lb.	.15¼	—
tanktruck, 1,000 gal. min., dlvd.	lb.	.12¾	—
tanks, dlvd	lb.	.12¼	—
Peri acid, dry, bbls., frt. alld	lb.	1.35	—
Paste, bbls., frt alld	lb.	1.30	—
Persic oil, USP (see Apricot kernel oil).			
Peru balsam, dms.	lb	1.25	1.50
Petitgrain oil, South American, cns., dms	lb	3.00	—
Petrolatum, cream, dms., c.l., refy.	lb.	.07½	—
dms., l.c.l., dlvd.	lb.	.09¾	—
tanks, refy.	lb.	.05¼	—
Extra amber, dms., c.l., refy.	lb.	06½	—
dms., l.c.l., dlvd.	lb	.08¼	—
tanks, refy.	lb.	04¼	—
USP, lily white, dms., c.l., refy.	lb.	07⅞	—
dms., l.c.l., dlvd	lb.	.10⅛	—
tanks, refy.	lb.	.05⅛	—
snow white, dms., c.l., refy	lb.	.08⅜	—
dms., l.c.l., dlvd	lb.	.10⅝	—
tanks, refy	lb.	.06⅛	—
soft yellow, dms., c.l., refy	lb.	.06½	—
dms., l.c.l., dlvd	lb.	.08¼	—
tanks, refy	lb.	.04¼	—
Petroleum pitch (see Asphalt, petroleum).			

Petroleum Products

Petroleum product quotations, formerly grouped under one heading, are now listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works	lb.	.16½	.18¾
non-ret. dms., l.c.l., works	lb.	.17½	.19
tanks, works	lb.	.14½	.17
50-55% sulfonic content, non-ret dms., c.l., works	lb.	.16	—
non-ret. dms., l.c.l., works	lb.	.17	—
tanks, works	lb	.13	—
o-Phenetidine, dms. c.l., frt. alld. E	lb.	.91	—
dms., l.c.l., same basis	lb.	.93	—
p-Phenetidine, dms., c.l., frt. alld.	lb.	1.05	—
dms., same basis	lb.	1.08	—
Phenobarbitol, USP, dms. 100-lb. lots	lb.	3.25	—
Phenobarbital-sodium, USP, dms., 100-lb. lots	lb.	3.25	—
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies	lb.	.17¾	.18
non-ret. dms., l.c.l., same basis,	lb.	.18¼	.19
tanks, same basis	lb.	.16	—
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis	lb.	.17¼	.17½
non-ret. dms., l.c.l., same basis	lb.	.17¾	.18½
tanks, same basis	lb.	.15½	—
39°C. or above, tar distilled non-ret. dms., c.l., same basis	lb.	.19¼	.19½
non-ret. dms., l.c.l., same basis,	lb.	.19¾	.20½
tanks, same basis	lb.	.17½	—
USP, syn., dms., c.l., t.l., frt. alld	lb.	.20	—
dms., same basis	lb.	.22	—
tanks, same basis	lb.	.18	—
Phenolphthalein, USP or yellow, fib. dms., 2,000-lb. lots	lb.	1.15	—
fib. dms. smaller lots	lb.	1.17	1.22
Phenothiazine drench fib. dms., t.l., dlvd	lb.	.44	—
fib. dms. l.t.l., same basis	lb.	.47	—
NF, fib. dms., t.l., same basis	lb.	.43	—
fib. dms. l.t.l., same basis	lb.	.46	—
Phenyl acetate, dms., 100-lb. lots, works	lb.	.50	—
Phenyl salicylate (see Salol).			
Phenylacetaldehyde, soln. 50%, bots	lb	2.40	2.70
100%, bots	lb	4.00	4.65
Phenylacetic acid, pure, cryst., cns.	lb.	1.45	1.75
dl-Phenylalanine, dms., works	lb.	27.00	37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots dlvd. E.	lb.	3.45	—
fib. dms., smaller lots, dlvd. E	lb.	3.80	—
N-Phenyldiethanolamine, dms., c.l., dlvd. E	lb.	.41	—
dms., l.c.l., dlvd. E	lb.	.42	—
tanks, dlvd. E	lb.	.38½	—
m-Phenylenediamine, dms., frt. alld.	lb.	.98	—
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works	lb.	1.70	1.80
p-Phenylenediamine, refd., tech., dms., works	lb.	1.42	—
Phenylethanolamine, dms., c.l., works	lb.	.75½	—
dms., l.c.l., same basis	lb.	.76¼	—
Phenylethyl acetate, bots	lb.	1.25	1.60
b-Phenylethylamine, dms., 1,000-lb. lots, works	lb.	1.10	—
dms., smaller lots, works	lb.	1.15	1.40
2-Phenylethyl alcohol, extra, dms.	lb.	1.14	1.45
Standard, dms	lb.	1.10	1.60
Phenylglyconic acid (see Mandelic acid)			
Phenylhydrazine base CP, btos	lb.	3.00	3.07
Phenylhydrazine hydrochloride, coml., kgs., works	lb.	1.75	—
Purif., bots., works	lb	5.17	—
1-Phenyl-3-methyl pyrazolone-5, fib. dms. 250-lb. lots, dlvd. E	lb.	1.80	—
fib dms. smaller lots, dlvd E	lb.	2.10	—
Phenylethylphenyl acetate, bots	lb.	4.15	4.35
o-Phenylphenol, dms., t.c.l. works.	lb.	.42	44
p-Phenylphenol, bgs., c.l., works	lb.	.38½	—
bgs., l.c.l., works	lb.	.43	—
Philippine copal gum, pale, chips, bgs	lb.	.25½	28
Pale, nubs, bgs	lb.	.32½	36
seeds, bgs	lb.	.20	Nom.
sorts, bgs	lb.	.23½	26
Phloroglucinol, coml., fib. dms., works	lb	6.40	—
CP, bots., works	lb.	17.75	—
Tech., fib. dms., works	lb.	10.45	—
Phloxin red toner (see Eosin red toner)			
Phosphate, defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports, New Orleans	ton.	48.00	—
Florida, land pebble, run-of-mine, washed, dried unground, 66-68% b.p.l., bulk, c.l., mines	long-ton.	5.14	—
68-70% b.p.l., bulk, c.l., same basis	long-ton.	5.54	—
70-72%, b.p.l., bulk, c.l., same basis	long-ton.	6.19	—
74-75% b.p.l., c.l., bulk, same basis	long-ton.	7.19	—
76-77% b.p.l., c.l., bulk, same basis	long-ton.	8.19	—
Above Florida prices are based on fuel oil at $2.87 per bbl. and labor at $1.43.			
Phosphoric acid, food grade, 75%, cbys. c.l., works, E. frt equald.	100 lbs.	6.75	—
cbys., l.c.l., same basis	100 lbs.	7.00	7.50
tanks, works	100 lbs.	5.35	—
Food grade, 80%, cbys., c.l., frt. alld	100 lbs.	7.60	—
cbys., l.c.l., works	100 lbs.	7.85	9.10
tanks, works	100 lbs.	5.75	—
NF, 85%, cbys., c.l., works	lb.	.0825	—
cbys., l.c.l., works	lb.	.0850	.0875
tanks, works	lb.	.0640	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.48	—
dms., smaller lots, works	lb.	.49	.50
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
dms., l.c.l., works, frt. equald	lb.	.21½	—
tanks, works, frt. equald	lb.	.19	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15	—
tanks, works	lb.	.12½	—
Phosphorus pentasulfide, solid, dms., c.l., works	lb.	.11½	—
dms., l.c.l., works	lb.	.12½	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1395	.1450
dms., l.c.l., works	lb.	.1550	.1650
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.38	—
dms., l.c.l., works	lb.	.39	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15	—
tanks, works	lb.	.12½	—
Phthalic anhydride, bgs., c.l., works, frt equald	lb.	.21	—
bgs., l.c.l., same basis	lb.	.22	—
tanks, same basis	lb.	.20½	—
Phthalimide, 97-98%, dms., frt. equald	lb.	.65	—
Phthalocyanine blue, full strength, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island St. Louis.	lb.	3.45	—
Resinated, bbls., same basis	lb.	3.00	—
Phthalocyanine blue, water dispersable, bbls., same basis	lb.	1.69	—
Phthalocyanine blue dlvd prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines Kansas City, Lincoln, Ohama, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.			
Phthalocyanine green toner, bbls., works	lb.	3.95	—
Resinated, bbls.	lb.	3.50	—
Water dispersable, bbls.	lb.	1.71	—
Phthalylsulfacetamide, 1,000-lb. lots or more	lb.	5.00	—
NF	lb.	5.20	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.43	.43¼
dms., l.c.l. works, frt, equald	lb.	.44	—
tanks, same basis	lb.	.415	.422
b,g-Picoline 5°C, dms., c.l., works.	lb.	.32½	—
dms., l.c.l., works	lb.	.33	—
g-Picoline, 98%, dms., works	lb.	2.00	—
Picric acid, NF, bbls	lb.	.85	—
Tech., bbls	lb.	.44	—
Pigment green B, kgs.	lb.	1.35	—
Pilocarpine hydrochloride, USP, bots	oz.	4.75	5.25
Pilocarpine nitrate, USP, bots., vials.	oz.	4.65	4.75
Pimento, Jamaican, bgs.	lb.	.61	—
Mexican, bgs.	lb.	.30	—
Pimento berry oil, NF, dms.	lb.	4.25	8.00
Pimento leaf oil, cns	lb.	2.05	—
Pine oil, dest.-dist., dms., l.c.l., works	lb.	.12¼	—
dms., l.c.l., ex whse New York.	lb.	.14¼	—
Steam-dist., dms., ex whse, New York	lb.	.176	—
dms., dlvd.	lb.	.179	—
Pineneedle oil, Siberian (see Abies Siberica oil).			
Pinetar oil, coml., dms., c.l., works.	lb.	.0561	—
dms., l.c.l., works	lb.	.0634	—
dms., c.l., ex whse., New York.	lb.	.0745	—
tanks, works	lb.	.046	—

TOMORROW'S PRODUCTS TODAY...THROUGH ENJAY PETROCHEMICALS

Basic ingredients for LACQUER finishes with that look of luxury!

Everyone admires those high-quality, high-gloss lacquer finishes on today's fine cars. Many manufacturers of these automobile lacquers specify Enjay solvents because of their purity, uniformity of boiling range and closely controlled evaporation rate.

And, Enjay solvents and ketones play an important role, too, in the formulation of many other surface coating products: lacquers, enamels and removers for paint, varnish and enamel.

The recently expanded Enjay Laboratories are fully equipped to handle any surface coating problem related to the application or use of any Enjay petrochemical. Why not write or call for more information?

Enjay offers a widely diversified line of petrochemicals for industry:

ALCOHOLS & SOLVENTS: Lower Alcohols, Oxo Alcohols, Ketones and Solvents; OIL & FUEL IMPROVERS: Detergent-Inhibitors, V-I improvers, Oxidation Inhibitors; CHEMICAL RAW MATERIALS: Olefins, Diolefins, Aromatics; ENJAY BUTYL RUBBER & VISTANEX.

ENJAY

Pioneer in Petrochemicals

ENJAY COMPANY, INC., 15 W. 51st STREET, NEW YORK 19, N. Y. Akron, Boston, Chicago, Detroit, Los Angeles, New Orleans, Tulsa

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared by U. S. Industrial Chemicals Co.*

U.S.I. CHEMICAL NEWS

August ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1957

Chemical Polish for Pure Zinc Improved With Ethyl Alcohol

An improved polish for zinc, consisting of nitric acid, ethyl alcohol, and hydrogen peroxide has been developed by a leading research laboratory.

Immersion of pure zinc for about two minutes in a bath of these chemicals is said to produce a high and lasting luster that resists rapid oxidation up to temperatures of around 660°F in air or in a sodium-potassium nitrate salt bath.

The role of ethyl alcohol in this polish appears to be that of a moderator of the nitric acid. Although polishes composed of other chemicals have been used for zinc, the nitric acid-ethyl alcohol-hydrogen peroxide polish is said to have longer life and to produce on the zinc a thinner oxide film of increased stability.

It is recommended that users prepare the polish fresh daily. *Caution:* ethyl alcohol should never be poured into nitric acid; the reverse, however, may be done safely. Interested readers who wish detailed assistance may call on U.S.I.'s technical service staff.

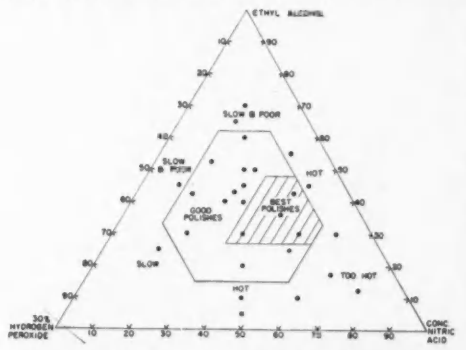


Diagram illustrates chemical polishing baths for zinc, based on 2 min. immersion time. (Diagram from "Journal of Metals.")

New Centrifuges Underscore Titanium Strength

High speed centrifuges fabricated with an aluminum-vanadium alloy of titanium now are in operation on an experimental basis. They are reputed to run 28% faster than stainless, with no greater working stress in the bowls.

Steady increase in such applications of titanium is expected — namely, where high strength-weight ratio as well as corrosion resistance is needed. Titanium now can be alloyed, welded, and bonded with chrome (U.S.I. Chemical News, May, '57). With three times the strength of aluminum, but only half the density of steel, titanium has been in heavy demand for aircraft components subject to severe resonance conditions.

U.S.I. is building a titanium sponge plant at Ashtabula, Ohio, which is expected to go on stream late this year. This modern plant will employ a sodium reduction process, and on the basis of present figures will turn out high purity titanium sponge at lower cost than any other existing commercial technique.

Organosodium Compounds Open Way to Economical Synthesis of Many Organometallic Compounds

Higher Yields Than with Conventional Grignard Reagents; Safer, Simpler Processing Among Advantages Cited

Many organometallic compounds can now be synthesized economically and safely from organosodium compounds, according to a paper recently presented before the American Chemical Society. In some cases the latter compounds can be used as intermediates to prepare an otherwise hard-to-make Grignard reagent. In others they can be reacted directly with metal halides to form new carbon-metal bonds.

Grignard reagents, compounds of magnesium with an organic halide, have long been standard building blocks for synthesizing organometallic compounds. However, from the commercial standpoint many Grignard reagents are difficult and hazardous to prepare, some require costly iodides or bromides as starting materials, and yields of desired organometallic compounds are frequently disappointing.

Among the advantages of organosodium compounds cited by the investigators are high yields and safety and convenience in handling.

For example, phenylsodium reacts with boron trichloride to form triphenylborine in 70% yield. Benzylsodium and phosphorus trichloride produce tribenzylphosphorus in 84% yield. Also, in this whole class of reactions, sodium as a starting material is more economical than the magnesium of typical Grignard reagents. Finally, reactions proceed in a hydrocarbon medium, thus eliminating the hazard of storing and handling large quantities of ether, the solvent used with Grignard reagents.

Reactions of RNa Compounds

The route to organometallic compounds from metallic sodium employs two general reactions. In the first an organic halide is reacted with sodium to produce an organosodium compound:

$$RCl + 2\,Na \rightarrow RNa + NaCl$$

This product is then reacted with a metallic halide to yield the desired organometallic compound:

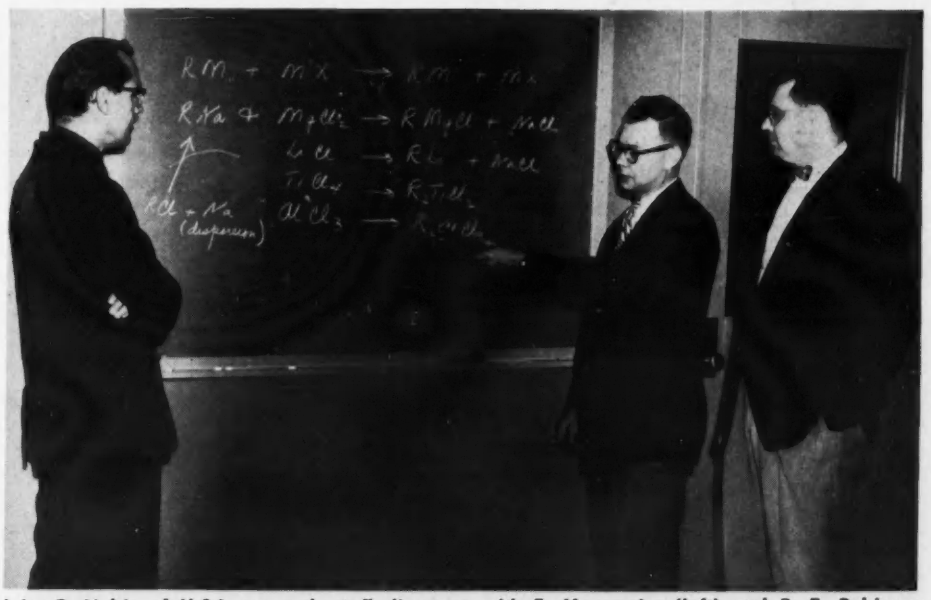
$$RNa + MgCl_2 \rightarrow RMgCl + NaCl$$

Organosodium compounds may react with the halides or alkoxides of lithium, magnesium, mercury, boron, aluminum, silicon, germanium, tin, lead, titanium, zirconium, phosphorus and iron.

Sodium Dispersions Key Factor

The recent introduction of simple and safe techniques for laboratory or plant preparation of finely dispersed sodium has stimulated wide interest in the use of organosodium compounds. Hansley's studies on preparation

MORE



John F. Nobis of U.S.I. research staff discusses with F. Moormeier (left) and R. E. Robinson (extreme right) equations for reaction of organosodium compounds to form various carbon-metal bonds. They presented a paper entitled "Use of Organosodium Compounds for Preparation of Other Carbon-Metal Bonds," at the Spring meeting of the American Chemical Society.

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared by U. S. Industrial Chemicals Co.*

August ★ # U.S.I. CHEMICAL NEWS ★ 1957

CONTINUED

Organosodium

and use of finely dispersed sodium (10-30 μ) to produce phenylsodium in 90% yields* opened a new era in organosodium chemistry.

Extensive research in U.S.I. laboratories shows that phenylsodium and benzylsodium can be made by carefully controlled conditions which include the presence of a slight excess of freshly dispersed sodium. The reaction between chlorobenzene and sodium under these conditions is immediate and complete: one mole of phenylsodium can be prepared in only 20 minutes. This reaction is easily adapted to larger scale and is now being used industrially.

The largest commercial plant utilizing organosodium compounds will soon be in operation at Tuscola, Illinois where U.S.I. is using disodiooctadiene, made directly from butadiene and dispersed sodium, to produce U.S.I. Isosebacic® acid, a mixture of 10-carbon dibasic acids.

(A new brochure on the preparation of sodium dispersions is available from U.S.I.)

Advantages of Organosodium

Until practical techniques for making sodium dispersions were developed, the reaction of an organosodium compound with magnesium chloride to produce a Grignard reagent had no commercial value. In general, it was easier to prepare Grignard reagents than the corresponding organosodium compounds. Now, however, there are cases where organosodium compounds can be made from starting materials which yield Grignard reagents only with difficulty. For example, organic chlorides react very sluggishly with magnesium, but yield organosodium compounds quite readily.

As a result, many Grignard reagents which have been prepared from expensive iodides or bromides can now be obtained from the cheaper chlorides, often in higher yields than are possible by the former method. Other organosodium compounds, synthesized by reactions which are completely unknown in the field of organomagnesium chemistry, can now be converted to hitherto unattainable Grignard reagents.

*V. L. Hansley, *I&EC 43*, 1759 (1951)

Cube-Shaped Polyethylene Containers for Corrosives Promote Lab Safety

An ingenious new container gives laboratory workers an almost accident-proof way to receive, store and dispense corrosive reagent chemicals.

The package consists of a cube-shaped polyethylene vessel inside a double corrugated paperboard box which serves as a shipping carton. The user need never remove the polyethylene cube from the box; the latter has a slotted opening for a pouring mouth on the cube and a pull-out safety grip for easy handling.

The new container is now being used by a leading manufacturer of reagent chemicals for packaging solutions of sodium hydroxide and potassium hydroxide in 1-gallon size.

It is light, unbreakable, and the unique design makes it convenient to dispense the contents. An economy feature is that no deposits are required, and there are no empties to return.

Polyethylene "Coating", "Lamination" Defined

An industry standard adopted by the National Flexible Packaging Assn. defines the difference between "coating" and "lamination", as these terms are applied to polyethylene packaging.

A coating is "a substance deposited while in a liquid state on a web without the use of adhesive means between the combined materials". Lamination is "the combination of two or more webs by the use of an adhesive layer between the webs".

Coating is the more common method. U.S.I. PETROTHENE 203 is a polyethylene resin that is widely used for this application.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U. S. I.

New adhesives for labels feature resin emulsion glue which penetrates silicone layer to bond on the glass surface. The adhesives feature controlled tacking in clear non-staining micro-thin films which are noncrystallizing, says company. **No. 1260**

A pamphlet on titanium tubing offers information on size range and tolerances and mechanical, physical and working properties of tubular titanium. **No. 1261**

A new remote control baffle for fume hoods is operated from an outside control panel. Manufacturer claims baffle can be quickly adjusted for any desired air flow aperture without interrupting work or exposing personnel to injury. **No. 1262**

A double acting rust remover is said to remove light rust in a few minutes, heavy rust in one to two hours. Deposits a rust-inhibiting film as it works, requires no rinsing of treated metal. **No. 1263**

A new booklet entitled "Zirconium and Hafnium" is now available. It covers in detail the mechanical and physical properties of the materials as well as general methods of fabrication and corrosion resistance. **No. 1264**

A new vinyl paint is said to achieve 5 to 8 times the film thickness per spray pass as other vinyl paints. Supplied in 8 colors, it is also said to be fast drying, easy to apply, economical, corrosion-resistant. **No. 1265**

Deuterated solvents and organo-metallics of high isotopic purity are now available in experimental quantities, with a wide range of research applications, including NMR spectroscopy. **No. 1266**

Color dispersion and intensity in plastics are said to be improved by a new extender. This product is also reported to increase lubricity, mold-release, and brightness of finish in many plastics. **No. 1267**

A continuous water vapor recorder determines low concentrations of water vapor in air or gas streams by measuring heat energy exchanged in adsorption or desorption. Designed for pipe lines, drying towers, feed streams. **No. 1268**

An external manipulator for tubing applies pressure externally on a flexible tube, producing a continuous, metered flow of liquids which can be as low as 0.1 cc. per day, according to the maker. **No. 1269**

A detector kit, small, compact and practical, rapidly determines low concentration of vapors of toluene diisocyanate and toluene diisocyanate urea. Said to be especially useful in plants making polyurethane plastics. **No. 1270**

PRODUCTS OF U.S.I.

INORGANIC CHEMICALS:

Sodium, Metallic: cast solid in tank cars, steel drums, pails; bricks in barrels, pails.
Chlorine: liquid, in tank cars.
Caustic Soda: 50% liquid, in tank cars.
Sodium Peroxide: dust-free granules, in drums.
Sulfuric Acid: all strengths, 60° Baumé to 40% Oleum. Also electrolytic grade to Federal specifications. Tank cars or tank wagons.
Ammonia: Anhydrous, commercial and refrigeration. Tank cars or tank wagons. Also Nitrogen Fertilizer Solutions.

OTHER PRODUCTS:

Alcohols: Ethyl (pure and all denatured formulas), Normal Butyl, Amyl, Fusel Oil; Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL® PR.

PETROTHENE® Polyethylene Resins.

Esters, Ethers and Ketones: Normal Butyl Acetate, Diethyl Carbonate, Diethyl Oxalate, Ethyl Acetate, Ethyl Ether, Acetone.

Intermediates and Fine Chemicals: Acetoacetarylides, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate solution, Urethan USP (Ethyl Carbamate).

Animal Feed Products: Calcium Pantothenate, Choline Chloride Products, Curbay B-G® 80, Special Liquid Curbay®, DL-Methionine, Niacin USP, Riboflavin Concentrates, Vitamin B_{12} and Antibiotic Feed Supplements, Vacatone® 40, Vitamin A, D_3 and K_3 Products, Antioxidant (BHT) Products.

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Riboflavin USP, Urethan USP, Intermediates.

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

U.S.I. SALES OFFICES

Atlanta • Baltimore • Boston • Buffalo • Chicago • Cincinnati
Cleveland • Dallas • Detroit • Houston • Indianapolis • Kansas City, Mo.
Los Angeles • Louisville • Minneapolis • Nashville • New Orleans
New York • Philadelphia • Pittsburgh • Portland, Ore. • St. Louis
Salt Lake City • San Francisco • Seattle

Pinetar oil, rectified, NF, dms., included, l.c.l., works, south	gal.	1.05	—
dms. incl. l.c.l., ex whse., New York	gal.	1.15	—
Refd., dms. incl., l.c.l., works	gal.	.92	—
dms. incl., l.c.l., ex whse., New York	gal.	1.02	—
Pink root, bls.	lb.	2.50	—
Piperazine, 95% or better, dms., c.l., frt. alld.	lb.	2.84	—
dms., l.c.l., same basis	lb.	2.88	—
Piperazine citrate, 100-lb. lots	lb.	2.00	—
Feed grade	lb.	1.61	—
Piperazine hexahydrate, 100-lb. lots.	lb.	1.60	—
Feed grade	lb.	1.23	—
Piperadine, dist., dms., frt. equald.	lb.	2.60	2.70
Piperonyl butoxide, dms., dlvd. E.	lb.	4.50	5.05
Piperonyl cyclonene dms. dlvd. E.	lb.	3.70	4.25

Pitches

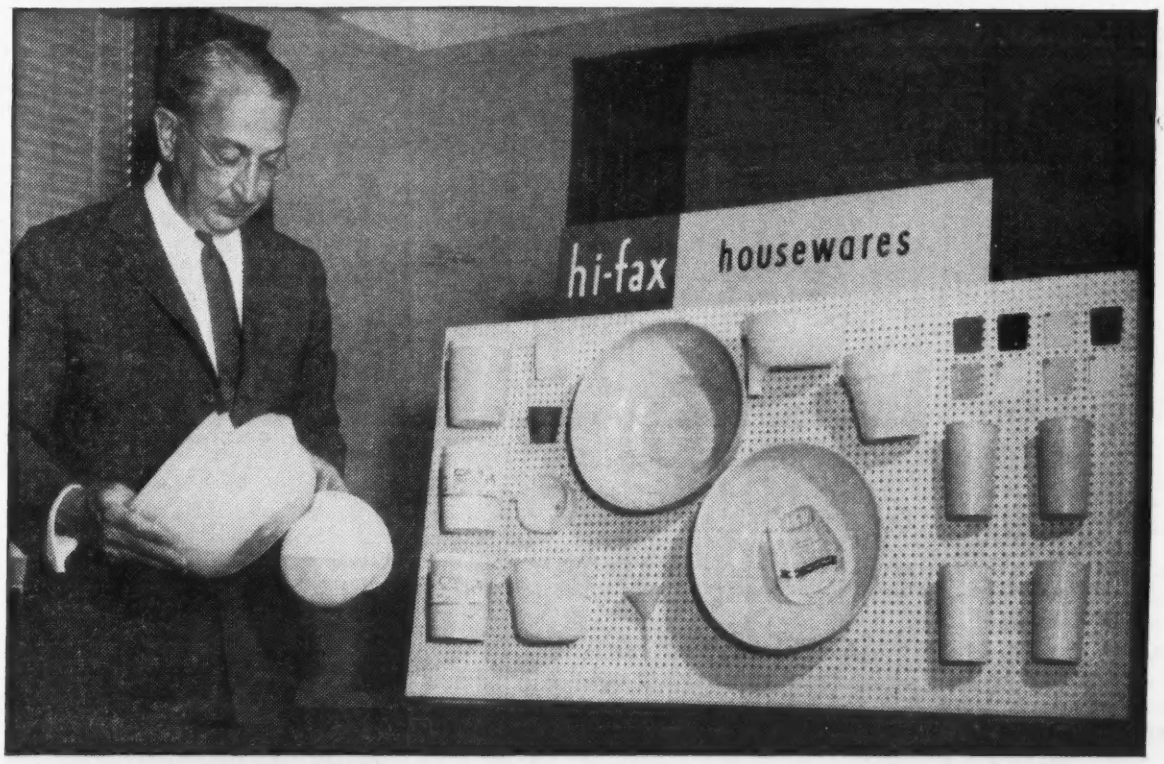
Pitch quotations, formerly grouped under one heading, are now listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	84.00	-87.00
Pleurisy root bls.	lb	.45	.50
Podophyllum resin, NF, dms	lb.	15.60	-16.10
Poke root, bls.	lb.	.19	.22
Pontianak copal gum, chips, bgs	lb.	.26	—
Nubs, bgs	lb.	.37	.40
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units.		.52	—
bulk, bots., 25-50 billion units. 1,000,000 units.		.54	—
bulk, bots., 1-25-billion units. 1,000,000 units.		.56	—
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb.	.41	—
dms., 10,000-20,000-lb lots, works.	lb.	.43	—
dms., smaller lots, works	lb.	.46	.48
Polyoxyethylene sorbitan tristearate, dms 20,000-lb lots, works.	lb.	.41	—
dms., 10,000-20,000-lb lots, works.	lb.	.43	—
dms., smaller lots, works	lb.	.46	.48
Poppy seed, Argentine, bgs.	lb.	.30	—
Dutch, bgs.	lb.	.34	—
Iranian.	lb.	.14½	.15
Polish, bgs.	lb.	.34	—
Turkish, bgs.	lb.	.32	—
Potash caustic, liq., 45% basis, dms., c.l., works 100 lbs		4.25	—
dms., l.c.l., same basis. 100 lbs		5.05	—
tanks, same basis 100 lbs		3.70	—
Reg., flake, 88-92%, dms., c.l., same basis 100 lbs		9.15	—
dms., l.c.l. same basis. 100 lbs.		10.20	—
Solid, 88-92%, dms. c.l., works. 100 lbs		8.70	—
dms., l.c.l., works 100 lbs		9.75	—
Potassium acetate, NF, dms	lbs.	.31	.36
Potassium bicarbonate, USP, gran., dms	lb.	.22	—
USP, powd., dms	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., l.l., works	lb.	.18	—
bgs., l.c.l., works	lb.	.18½	.19¾
Potassium bichromate in dms ¾c. higher.			
Potassium bitartrate, NF, dom., gran or powd., bbls. 5,000 lbs. 1 shipt	lb.	.40½	—
Potassium bitartrate, NF, dom., gran. or powd., dms., c.l.	lb.	.40	—
smaller lots	lb.	.41	.43
NF, imp. gran. or powd., kgs	lb.	.33½	.37
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50	—
dms., smaller lots, works	lb.	.52	.62
Potassium bromide, USP, gran., bbls., kgs.	lb.	.39	.40
Potassium carbonate, NF, gran., bbls., dms	lb.	.20	—
NF, powd., bbls., dms	lb.	.21	.22
Tech., calcined, bbls., c.l., works. 100 lbs.		9.00	—
bbls., l.c.l., same basis. 100 lbs.		10.05	—
hydrated, 83-85%, bbls., c.l., works 100 lbs.		7.60	—
bbls., l.c.l., works 100 lbs.		8.65	—
Potassium chlorate, cryst., dms., c.l., works	lb.	.11¼	—
dms., l.c.l., works	lb.	.11½	.12½
Powd., dms., c.l., works	lb.	.11¾	—
dms., l.c.l., works	lb.	.12	.13
NF, gran., 25-lb metal dms	lb.	.36	—
Potassium chloride, agricultural (see Potassium muriate).			
Potassium chloride, indust., 99.9% KCl, bulk, c.l., works	ton	29.00	—
bgs., c.l., works	ton	33.50	—
99.3% KCl, bulk, c.l., works.	ton	27.00	—
bgs., c.l., works	ton	31.50	—
USP, cryst., dms	lb	.21	.23
gran., dms	lb	.15	.17
powd., dms	lb.	.24	.26
Potassium chromate, tech., bgs	lb.	.50	.50½
Potassium citrate USP, gran., dms.	lb.	.43	—
USP powd., dms	lb.	.40½	.41½
Potassium cyanide, dms. 20,000-lb lots or more works	lb.	.45	—
dms., 2,000-19,999-lb lots, works.	lb.	.455	—
dms., smaller lots, works	lb.	.465	—
Potassium dichromate (see Potassium bichromate).			
Potassium ferricyanide, dms., ton lots, works	lb.	.50	—
dms., smaller lots, works	lb.	.65	—
Potassium ferrocyanide, bgs., ton lots	lb	.23	—
bgs., smaller lots	lb.	.23½	—
Potassium fluoborate, fib. dms., c.l., works	lb.	.30	—
fib dms., l.c.l., works	lb.	.31	—
Potassium fluoride, dms., works	lb.	.37	.38
Potassium gluconate, dms.	lb.	1.62	—
Potassium guaiacolsulfonate, NF, dms	lb.	2.10	2.30
Potassium hydroxide, tech. (see Potash, caustic).			
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots	lb.	.33½	.38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots	lb	1.38	—
Potassium iodide, dms.	lb.	1.90	1.95
Potassium manure salt, 22% K_2O, bulk, c.l., works unit-ton.		.17	.1765
Potassium metabisulfite, gran., dms.	lb.	.20	.21
Powd., dms.	lb.	.25	—
Potassium muriate, standard and gran., 59-63% K_2O, bulk, c.l., works, base price unit-ton.		.34	—
bulk, c.l., works, July forward unit-ton.		.34½	.36
Gran., 60-63% K_2O, bgs., c.l., works, contract price ton.		26.25	-26.50
bgs., c.l., works list price ton.		27.45	-27.50
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.		16.50	—
bbls., smaller lots 100 lbs.		17.50	-18.00
NF, gran., bgs., 20-ton lots. 100 lbs.		9.25	—
bgs., smaller lots 100 lbs.		10.50	-11.00
NF, powd., bgs., 20-ton lots 100 lbs.		10.25	—
bgs., smaller lots 100 lbs.		11.50	- 12.00
Potassium oxalate, neutral, tech., fine gran., bbls., dms.	lb.	.30	- .31
Potassium pentaborate, gran., bgs., c.l., works ton.		191.50	—
dms., ton lots, ex whse ton.		302.00	—
dms., smaller lots ex whse ton.		307.00	—
Powdered potassium pentaborate $10.25 per ton higher.			
Potassium perchlorate, dms., c.l., works	lb.	.18½	—
dms., l.c.l., works	lb.	.19	- .20
Potassium permanganate, coml. kgs., works	lb.	.26	- .29
USP, dms., works	lb.	.29¼	- .31
Potassium persulfate, dms., c.l., works	lb.	.17½	—
dms., l.c.l., works	lb.	.18	- .21
Potassium pyrophosphate, tetrabasic, dms., works	lb.	.15½	- .18½
Potassium prussiate red (see Potassium ferrocyanide).			
Potassium prussiate red (see Potassium ferricyanide).			
Potassium silicate, electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs.		6.50	—
dms., l.c.l., 5 dms. or more, works 100 lbs.		7.25	- 7.65
tanks, works 100 lbs.		6.15	—
40.5° Be, 1:2.1, dms., c.l., works 100 lbs.		6.45	—
dms., l.c.l. 5 dms. or more works 100 lbs.		7.20	- 7.60
tanks, works 100 lbs.		6.10	—
Potassium silicate, glass, bgs., c.l., works 100 lbs.		17.00	-17.30
bgs., l.c.l., works 100 lbs.		17.80	—
Soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs.		5.80	—
dms., l.c.l., 5 dms. or more works 100 lbs.		6.55	- 6.95
tanks, works 100 lbs.		5.45	—
Potassium silicofluoride, bgs., works	lb.	.09½	- .10
Potassium silicofluoride in drums, lb. higher.		0.4c.	per
Potassium stannate, dms. frt alld. E	lb.	.755	- .827
Potassium sulfate, agricultural, 50% K_2O, bulk, works, base price unit-ton.		.64	—
bulk, works, July forward. unit-ton.		.67	—
NF VII, cryst., dms	lb.	.31	- .33
gran., dms.	lb.	.18½	—
powd., dms.	lb.	.16	- .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).			
Potassium thiocyanate, NF, cryst., dms., works	lb.	.84	- .94
Tech., dms., works	lb.	.77	- .79
Potassium titanate, ctns., c.l., works.	lb.	.16¼	—
ctns., 5-ton lots, works	lb.	.16½	—
ctns., 1-ton lot or less, works	lb.	.16¾	—
Potassium toluene sulfonate, dms., c.l. or t.l., works	lb.	.42	—
dms., l.c.l., works	lb.	.46	—
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton.		13.45	—
bulk, works, July forward ton.		14.00	—
Potassium-sodium tartrate, NF, gran. or powd. dms., c.l	lb.	.42½	—
dms., 5,000-lb. lots	lb.	.43	—
dms., smaller lots	lb.	.43½	.49
Potassium-titanium fluoride, fib. dms., works	lb.	.39	.40
Potassium-zirconium fluoride, fib. dms., c.l., works	lb.	.50	—
fib. dms., l.c.l., works	lb.	.52½	.55
Potato starch (see Starch, potato).			
Pregnenolone, bots.	gram.	.45	—
Pregnenolone acetate, bots.	gram.	.40	—
Procaine hydrochloride, USP, dms., 1,000-lb lots, frt. alld	lb.	2.83	—
dms., 100-500 lb. lots	lb.	2.95	3.15
Progesterone, USP, bots., 100 gram lots	gram.	.50	—
Progesterone acetate, bots.	gram.	.70	—
Propane, indust., tanks, group 3.	gal.	.05	—
tanks, New York harbor	gal.	.093	—

HOW HERCULES HELPS...

WITH PENTAERYTHRITOL. Outstanding resistance to heat, to light, and to moisture have made PE-based alkyd resins the preferred approach to many of the newest developments in surface coatings. Other applications for this new chemical—in such things as vinyl plastics, fire-retardant paints, and floor coverings—are growing rapidly. The demand for PE has skyrocketed. And Hercules, with a new Midwest producing plant, is assuring ample room for even further product developments.

WITH PLASTICS. The first commercial plant utilizing the famed Ziegler process is now on stream in Parlin, N. J. producing Hi-fax®. This completely new Hercules ethylene polymer offers a combination of characteristics never before available in any plastic. The panel board below displays some of the superior housewares made with Hi-fax. Providing many advantages over conventional polyethylene, Hi-fax is already finding other applications in a wide variety of products.



HERCULES

HERCULES POWDER COMPANY
INCORPORATED
900 Market St., Wilmington 99, Del. Sales Offices in Principal Cities

CHEMICAL MATERIALS FOR INDUSTRY

057-B

Propionic acid, syn., pure dms., c.l., works lb. .22¾- —
dms., l.c.l., works lb. .23¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd. lb. .15¾- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
n-Propyl gallate dms., 100 to 2,000-lb lots works lb 3.90 - 4.40
n-Propyl p-Hydroxybenzoate, USP dms lb 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo 55.00 - —
bots., smaller lots kilo 55.10 -55.30
Propylene dichloride, consumers, dms., c.l., dlvd. E lb. .0845- —
dms., t.c.l., same basis lb. .0950- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in west 1c. higher dlvd on same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —

Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
dms., t.c.l., dlvd. E lb. .19 - —
tanks, dlvd. E lb. .15½- —
Psyllium seed, black, bgs lb. .28 - .30
Blonde, bgs lb. .18 - —
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½ 2, 3, bgs., ton lots lb. .03⅝- .04¼
bgs., smaller lots lb. .03⅞- .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs ton. 58.00 - —
fine, bgs ton. No prices.
Pumpkin seed, bgs lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works. lb. .45 - —
Powd., 1.3% pyrethrins, bbls., works lb. .65 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal. 41.75 -42.75
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 10.00 - —

Pyrethrum oleoresin, purif., 20% dms., works lb. 10.00 -10.10
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.77 - —
dms., t.c.l., same basis gal. 2.80 - —
Refd., 2°, non-ret. dms., t.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .29½- —
Pyrites, Canadian, 48-50% S, works, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb dms lb. 3.50 - —
Pyroxylin scrap, shavings, amber, cs., works lb. No stocks
Shavings, mixed colors, dms., works lb. .11 - —
translucent colors, dms., works lb. .16 - —
translucent pastels, cs., works lb. .14 - —
white, China, ivory, dms., works lb. .16 - —
white, dense, opaque, dms., works lb. .12 - .15
unground, amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled, dms., works lb. .13 - —
USP, bots lb. 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin, bgs., works lb. .16½- .17
Clarif., liq., 35% tannin, bbls., works lb. .08¼- .08½
clarif., solid, 64% tannin, bgs., c.l., ex dock, duty extra lb. .107429 —
Ordinary solid, 63% tannin, bgs., c.l., same basis lb. .098035 —
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
Liq., No. 1, bbls., l.c.l. lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine sulfate, USP cns. 1,000-oz. lots oz. .74½- .75
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Quinine bisulfate, USP, cns., 100-oz. lots oz. .37½- —
Quinine hydrochloride, cns. 1,000-oz. lots oz. .29 - .31¼
Quinine sulfate, USP cns. 1,000-oz. lots oz. .26 .32
Quinoline, dms., c.l. frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, dms. frt. alld., 100% basis lb. .88 - —
Powd., frt. alld. 100% basis lb. .98 - —
Rapeseed oil, tanks lb. .18¾ Nom.
Rare earth oxalate, 45-50%, bgs., works lb. 1.00 —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.75 - —
Red, carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

Red Pigments

Red pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)
Red, saunders, NF powd., bbls lb. .35 40
Reserpine, cryst., bots gram. 1.70 2.00
Resorcinol, tech. grade, dms., c.l., works, frt. equald lb. .77½- —
dms., l.c.l. same basis lb. .78½- —
USP, cryst., dms. works lb. 2.75 —
powd., dms., works lb. 2.95 —
Resorcinol monoacetate, NF, dms. lb. 3.00 3.25
Rhatany root, bgs. lb. .15 16
Rhodamine red toner, molybdated, PMA, kgs lb. 5.80 —
Tungstated, PTMA works, kgs lb. 6.60 —
Rhodinol, 5-lb. cans lb. 32.00 -36.00
Rhubarb root, India, whole, bgs lb .30 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo. 40.00 - —
USP, readily soluble, bots. dlvd. kilo .130.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo. 107.50 - —
Rice bran oil, clarif., dms., t.c.l. lb. .17½- —
Clarif., tanks, dlvd. E lb .15 .15¼
Rice starch (see Starch, rice).
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots oz. 40.00 -47.50
Rosemary oil, Spanish, NF, cns., dms lb. .70 - 1.00
Spanish, tech., cns., dms. lb. .50 - .70
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, unit-lb. .12 - —
resin, 25-45%, fib dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. .13375- —
Rue oil, bots. fb. 2.00 - 2.50
Rutin, NF, fib. dms., 10 kilo lots. kilo. 17.00 - —
fib. dms., 5 kilo lots kilo. 17.50 - —
fib. dms., 1 kilo kilo. 18.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls. lb. .30 - .32
Powd., bbls lb. .49 - .49¼
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, cryst., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms., smaller lots lb. 1.70 - 1.80
USP, powd., soluble insoluble, dms., 1,000-lb. lots lb. 1.65 - —
dms., smaller lots lb. 1.75 - 1.95
Safflower oil, dms., New York lb. .1785- .1835
tanks, same basis lb. .1585- —
Saffron, Spanish, USP, tins lb. 45.00 - —
Safrol, dms. lb. .88 - .90
Sage, Cretan, bgs. lb. .11 - —
Dalmatian, bgs. lb. .40 - —
Italian lb. .18 - .20½
Sage oil, clary, bots. lb. 30.00 -32.00
Dalmatian, cns. lb. 3.85 - —
Spanish, cns. lb. 1.20 - 1.45
Sago flour, raw, bgs. lb. .07 - .07¼
Refd., bgs. lb. .08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms. lb. 1.05 - 1.15
Salicylic acid, crude, fib. dms., c.l., t.l., frt. alld. lb. .37 - —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38 - —
Sublimed, tech., fib. dms., c.l., t.l., dlvd. lb. .39 - —
fib. dms., l.c.l., dlvd. lb. .43 - —
USP, cryst., 200 lb. fib. dms., 1,000 lbs. or more lb. .50 - —
less than 1,000 lbs. lb. .53 - —
100 lb. fib. dms., 1,000 lbs. or more lb. .52 - —
less than 1,000 lbs. lb. .55 - —
USP, powd., 100 lb. fib. dms., 1,000 lbs. or more lb. .57 - —
less than 1,000 lbs. lb. .60 - —
Salol, NF, gran., bbls., kgs. lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l., 100 lbs. 1.07 - —
Table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.32 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indian, chips, bgs. .65 - .66
East Indian, powd., fib. dms. lb. .75 - .76
Sandalwood oil, cns. lb. 11.50 -15.50
Sardine oil, crude, tanks, Pac. coast. lb. No stocks.
Sassafras oil, artif., dms. lb. .50 62
Nat., dom., dms. lb. 1.90 - 2.10
Sassafras oil, Brazilian (see Ocotea cymbarum oil).
Savin oil, cns. lb. 2.75 - —

Commercial Laundries
Dyeing and Finishing
Paint
Bottle Washing
Car Washing
Leather Processing
Paper & Pulp
Liquid Detergents
Metal Cleaning
Dairy
Railroad
Household Detergents
Suggestion for a surfactant processor who can see profit in these pictures
If you're compounding liquid or dried formulations of the alkyl aryl surface-active type, we suggest that you start with "the successful ingredient"
NEOLENE 400
the basic raw material used by the foremost detergent processors

©1957, Continental Oil Company

Consider these other Conoco Petrochemicals

WATER-SOLUBLE SULFONATES—produced from NEOLENE 400. Available as sulfonate slurry, sulfonic acid, or in spray-dried and drum-dried forms.

OIL-SOLUBLE SULFONATES—manufactured by sulfonation of synthetically produced hydrocarbon under closely controlled conditions.

CONOCO H-300—Secondary plasticizer for vinyls "the extender of profit"—outstanding light stability . . . improved low-temperature flexibility . . . viscosity depressant and stabilizer in plastisols.

CONOCO Petrochemicals

CONTINENTAL OIL COMPANY
Petrochemical Department

Petrochemical know-how from the ground up!

Continental Oil Company, Petrochemical Department, Division D-8
1270 Sixth Avenue, New York 20, N. Y.—1353 No. North Branch Street, Chicago, Ill.
Export: Airco Company International, 150 East 42nd Street, New York 17, N. Y.

Savory oil, cns.	lb.	4.25	—
Schaeffer's salt, paste, dms., frt. alld. 100% basis	lb.	.95	—
Powd., bgs., frt. alld., 100% basis.	lb.	.95	—
Scopolamine hydrobromide, USP, bots.	oz.	13.00	-15.90
Sebacic acid, purif., dms., c.l., works	lb.	.69	—
dms., l.c.l., works	lb.	.71	.75
Seidlitz mixture, fib. dms., 5,000-lb. lots	lb.	.30½	—
fib. dms., smaller lots	lb.	.31	.32
Selenium, powd., 99½%, dms., dlvd.	lb.	10.50	-12.00
Senega root, bls.	lb.	2.65	- 2.70
Senna leaves, Alexandria, whole and half, bls	lb.	.19	—
siftings	lb.	.17	—
Tinnevelly, No. 1, bls.	lb.	.16	.18
No. 2, bls.	lb.	.13	.15
No. 3, bls.	lb.	.11	.13
pods, bls	lb.	.16	—
powd., bbls., bxs	lb.	.17	—
Serpentaria root, bls	lb.	7.50	—
Sesame oil, USP dms.	lb.	.38	.39
Sesame seed, Mediterranean, hulled, bgs	lb.	.21½	—
nat., bgs.	lb.	.17	—
Nicaraguan, hulled, shipt., bgs.,	lb.	.25½	—
nat., bgs.	lb.	.20½	—
Salvadorian, nat., bgs.	lb.	.20½	—
Indian, nat., bgs	lb.	N.P.	
Shellac bleached, bonedry, bgs., 1,500-lb. lots	lb.	.48	—
bbls., 1,500-lb. lots	lb.	.49	—
kgs., 1,500-lb. lots	lb.	.50	—
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.			
Shellac, bleached, refd. bgs., 1,500-lb. lots	lb.	.58	—
bbls., 1,500-lb. lots	lb.	.59	—
kgs., 1,500-lb. lots	lb.	.60	—
Orange, lemon No. 1 bgs., 10-bg. lots	lb.	.39	.41
lemon No. 2, bgs., 10-bg. lots	lb.	.37	—
superfine, bgs., 10-bg. lots	lb.	.34	.35
TN, bgs., 10-bg. lots	lb.	.34	Nom.
Shellac in 1 to 10-bg. lots 1c. per lb more.			
Shingle stain oil, tar distillate, dms., c.l., works	gal.	.37	—
dms., l.c.l., works	gal.	.48	—
tanks, works	gal.	.25	—
Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06¼	.17¼
paper bgs., l.c.l. works	lb.	.06½	.17½
Raw, paper bgs., c.l., works	lb.	.06¼	.16¼
paper bgs. l.c.l. works	lb.	.06½	.16½
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works	ton.	25.00	—
bgs. l.c.l., works ex whse.	ton.	45.00	-55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l. works	ton.	20.00	—
bgs., l.c.l. works	ton.	25.00	—
99½%, 140 mesh bgs., c.l., works	ton.	15.00	—
bgs., l.c.l., works	ton.	20.00	—
Silicon tetrachloride tech., dms., c.l., works	lb.	.18	—
dms., l.c.l., works	lb.	.22	.30½
tanks, works	lb.	.17	—
Silver bullion, ingots, cs.	Troy oz.	.91⅛	—
Silver cyanide, fib dms. 2,500-oz. lots	oz.	.86¼	—
fib. dms., 1,000-oz. lots	oz.	.86⅝	—
fib. dms., 500-oz. lots	oz.	.86¾	—
fib. dms., 100-oz. lots	oz.	.87	—
Silver nitrate, CP, cryst., bots., 2,500-oz. lots	oz.	.62¼	—
bots., 1,000-oz. lots	oz.	.63⅜	—
bots., 500-oz. lots	oz.	.64	—
bots., 250-oz. lots	oz.	.64½	—
USP granular silver nitrate 4c. per oz. higher			
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots	oz.	1.15	—
Strong, NF, bots. dms., 1,000-oz. lots	oz.	1.10	—
Snakeroot oil, Canada, cns	lb.	No stocks.	
Soapbark, crushed, bls.	lb.	.45	—
Powd., bls.	lb.	.45	—
Whole, bls.	lb.	.38	.40
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs.		1.90	—
paper bgs., l.c.l., stock pts 100 lbs.		3.00	4.77
bulk, c.l., works 100 lbs.		1.60	—
Light, 58%, paper bgs., c.l., works 100 lbs.		1.85	—
paper bgs., l.c.l., stock pts. 100 lbs.		3.95	4.72
bulk, c.l., works 100 lbs.		1.55	—
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs.		4.70	—
Liq., 50%, sellers' tanks, works, dry basis 100 lbs.		2.90	—
50%, rayon type, sellers' tanks, works, dry basis 100 lbs.		2.90	3.00
73%, sellers tanks, works, dry basis 100 lbs.		3.00	—
73%, rayon type, sellers' tanks, works, dry basis 100 lbs.		3.00	3.10
Solid, 76%, dms., c.l., works 100 lbs.		4.30	—
Soda, sal. conc., bgs., c.l., works. 100 lbs.		2.50	—
bgs., smaller lots, works 100 lbs.		2.80	—
Sodium acetate, anhyd. bgs., c.l., frt. equald	lb.	.13	—
bgs., l.c.l., frt. equald	lb.	.13¾	—
NF, 60%, gran., dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15½	—
Sodium alginate, NF, white powd., dms., 300 lbs. or more	lb.	.93	—
Sodium p-aminobenzoate, dms., 1,000-lb. lots or more	lb.	2.35	—
dms., smaller lots	lb.	2.45	2.55
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted	lb.	2.70	—
Sodium antimoniate, bbls., c.l., dlvd. E	lb.	.28	—
bbls., l.c.l., dlvd. E	lb.	.29½	—
Sodium arsenate, 45% arsenic pentoxide, dms., c.l., works.	lb.	.12½	—
dms., l.c.l., works	lb.	.13¾	.14½
Sodium arsenite, 90%, pink powder, 75% arsenious oxide, dms., works	lb.	.12¼	—
dms., l.c.l., works	lb.	.13	.14½
Soln., dms., works	gal.	.59	.67
Sodium ascorbate, dms., 25-50 kilo lots	kilo.	12.00	—
dms., 10-kilo lots	kilo.	12.35	—
dms., 5-kilo lots	kilo.	12.75	—
dms., 1-kilo lots	kilo.	13.00	—
bots., 500-gram lots	gram.	.0135	—
Sodium benzoate, tech., bbls., dms., 100-lb. lots or more	lb.	.39	—
USP, bbls., dms., 100-lb. lots or more	lb.	.46	—
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs.		2.95	—
bgs., l.c.l., works 100 lbs.		3.85	—
USP, powd., bgs., c.l., works. 100 lbs.		2.55	—
bgs., l.c.l., works 100 lbs.		3.45	—
Sodium bichromate, gran., bgs., c.l., t.l., works	lb.	.13	—
bgs., l.c.l., works	lb.	.13½	.14¾
Sodium bifluoride bbls., c.l., works, frt. equald	lb.	.19½	—
bbls., l.c.l., same basis	lb.	.1990	—
Sodium bisulfate, bulk, c.l., works 100 lbs.		2.00	—
dms., c.l., frt. equald 100 lbs.		3.00	3.60
dms., l.c.l., frt. equald 100 lbs.		3.50	4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs.		5.00	—
bgs., l.c.l., works 100 lbs.		5.40	—
Soln., 35°, bbls., c.l., works, 100 lbs.		1.70	—
bbls., l.c.l., works 100 lbs.		2.20	—
Sodium borate (see Borax).			
Sodium bromide, USP, bbls., works.	lb.	.40	—
Sodium carboxymethyl cellulose (see CMC).			
Sodium carbonate, cryst., monohydrated (see Soda, sal).			
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs.		3.10	—
bgs., l.c.l., works 100 lbs.		3.50	—
Sodium chlorate, cryst., dms., c.l., works	lb.	.09	—
dms., l.c.l., works	lb.	.09½	.10½
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb.	.05	—
Sodium chlorite, tech., dms., c.l., works	lb.	.58	—
dms., 20-ton lots or more works.	lb.	.66	—
dms., smaller lots, works	lb.	.70	.73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27	—
dms., l.c.l., works	lb.	.28	—
Sodium chromate, anhyd., fib. dms., c.l., t.l., works	lb.	.14¾	—
fib. dms., l.c.l., works	lb.	.15¼	.16½
Tetrahydrate, bgs., c.l., t.l., works.	lb.	.1015	—
bgs., l.c.l.	lb.	.1065	.1190
Sodium citrate, anhyd., dms.	lb.	.62	—
NF VIII, gran., dms	lb.	.26½	.27½
USP, XIV gran. dms	lb.	.29½	.30½
Sodium citrate, USP powd. prices ½c. higher.			
Sodium cyanide, flake, 96-98%, dms., c.l or 20,000-lb. lots	lb.	.193	—
dms., over 1,000-lb. lots	lb.	.203	—
dms., 100-lb. to 1,000-lb. lots.	lb.	.213	—
Gran. sodium cyanide 1c. higher.			
Sodium diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.15	—
250-lb. dms. l.c.l. works	lb.	.15¾	—
Anhyd., dms. c.l., works	lb.	.18	—
dms., l.c.l., works	lb.	.18¾	—
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½	—
bgs., smaller lots	lb.	.14	—
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390	—
fib. dms., l.c.l., works, frt. equald	lb.	.1430	—
Sodium formate, bgs., c.l., works. 100 lbs.		7.60	—
bgs., l.c.l., works 100 lbs.		8.65	—
Sodium gentisate, 100-lb. fib. dms.	lb.	5.50	—
Sodium gluconate, refd. dms.	lb.	.80	.83
Tech., dms.	lb.	.35	—
Sodium hydride powd. dms., works.	lb.	1.90	2.75
Sodium hydrosulfide (see Sodium sulfhydrate).			
Sodium hydrosulfite, dms., c.l., frt. alld	lb.	.24	—
dms., l.c.l., frt. alld	lb.	.24½	—
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots.	lb.	.23½	.28
Sodium hydroxide, tech. (see Soda, caustic).			
Sodium hypophosphite, NF, dms., 1,000-lb. lots	lb.	.97	—
Sodium cyanate, dms. 1,000-lb. lots, works	lb.	.85	—
dms., smaller lots, works	lb.	.90	1.10
Sodium hyposulfite, anhyd., photo grade, bgs. c.l., works. 100 lbs.		8.05	—
bgs., l.c.l., works 100 lbs.		8.45	—
Anhyd., tech., bgs. c.l., works. 100 lbs.		7.25	—
bgs., l.c.l. works lb 100 lbs.		7.65	—
Hexahydrate, pea, cryst., bgs., c.l., works 100 lbs.		5.15	—
bgs. l.c.l. works 100 lbs.		5.55	—
photo grade, bgs. c.l., works. 100 lbs.		7.75	—
bgs., l.c.l., works 100 lbs.		8.05	—
Pentahydrate, tech., bgs., c.l., works 100 lbs.		5.15	—
bgs., l.c.l., works 100 lbs.		5.55	—
Sodium iodide, USP bots., dms	lb.	2.55	—
Sodium lactate, edible, 60%, cbys., dms., works	lb.	.26½	—
Sodium lauryl sulfate, dms., c.l., dlvd	lb.	.19	—
dms., l.c.l., dlvd	lb.	.19½	.20¾
tanks, dlvd	lb.	.18	—
Sodium metabisulfite (see Sodium bisulfite).			

YOU CAN RECOVER

OVER 80%

PENTANES PLUS

FROM LEAN NATURAL GAS

100 pounds of Davison Silica Gel adsorbs 1.5 to 3.0 gallons of hydrocarbons at 80% recovery efficiency

Why lose valuable hydrocarbons suitable for sale as gasoline, when you can recover them so easily with Davison Silica Gel?

This desiccant has high capacity for moisture and hydrocarbons, so minimum size equipment does the job. You'll find, too, that Davison Silica Gel is readily reactivated . . . gives low dewpoints . . . resists fouling . . . gives low pressure drop . . . is hard, tough, non-dusting and non-corrosive.

Why not get the whole story? See for yourself why Davison Silica Gel is ideal for natural gas dehydration and hydrocarbon recovery. Write today for literature.

Progress Through Chemistry

DAVISON CHEMICAL COMPANY

Division of W. R. Grace & Co.

Baltimore 3, Maryland

Sodium Metaborate—Solvent Naphtha

Sodium metaborate, octahydrate, gran., bgs., c.l., works ton 87.00 - —
bgs., ton lots, ex whse ton 143.00 - —
bgs., smaller lots, ex whse ton 148.00 - —
Tetrahydrate, dms., c.l., works ton 204.00 - —
dms., ton lots, ex whse ton 242.50 - —
dms., smaller lots ex whse ton 247.50 - —

Sodium, metallic, bricks, 14,000-lb. lots or more, works lb. .19½ - —
Fused, 14,000-lb lots or more, works lb. .19 - —
tanks, works lb. .17 - —
Sodium metanilate bbls., frt. alld. lb. .62 - —
Sodium metasilicate anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs., l.c.l., works 100 lbs. 6.15 - 8.10
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - 8.55
Sodium metasilicate pentahydrate, bgs., c.l. works 100 lbs. 4.45 —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate anhyd., dms., works, frt equaid lb. .92 - .96
Cryst., dms., works, frt. alld lb. .73 - .74
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate monohydrated).
Sodium naphthionate, bbls lb. .70 - —

Sodium nitrate, dom., crude, bgs., c.l., works ton 47.00 - —
bulk, c.l., works ton 43.50 - —
imp., 100-lb. bgs. c.l., Atl. Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.50 - —
Sodium nitrite, USP, bbls., c.l., works,, frt. equlad 100 lbs. 8.50 - —
bbls. l.c.l., same basis 100 lbs. 10.50 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs 6.70 —
dms., l.c.l., works 100 lbs 7.05 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l., works. 100 lbs 5.65 —
bbls., l.c.l. works 100 lbs 7.60 7.90
Sodium oxalate 88% bgs., works. 100 lbs. 10.85 —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, bgs. c.l., works, frt. equald lb. .26 — —
bgs., l.c.l., same basis lb. .27½ - .34
Pellets, bgs. c.l., same basis lb. .26 - —
bgs., l.c.l., same basis lb. .27½ - .34
Sodium pentachlorate powd., ngs., dms. c.l., same basis lb. .25 —
bgs. dms., l.c.l. same basis lb. .26½ - .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.

Sodium perborate, NF, tech., bgs., c.l., works lb. .19 - —
bgs., l.c.l., works lb. .21 - —
Sodium peroxide, dms., c.l., t.l., dlvd, E. of Miss. lb. .20½ - —
dms., l.c.l. same basis lb. .21 - .21½
Sodium phenolsulfonate, USP IX, gran., dms lb. .48 - .49
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 7.65 - 8.05
bgs., l.c.l., works 100 lbs. 8.05 - 8.65
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., frt. equald 100 lbs. 8.10 - —
Dibasic, USP, dried powd. bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 - —
bgs., l.c.l., frt equald 100 lbs. 9.10 - 9.70
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.65 - —
bgs., l.c.l., frt. equald 100 lbs. 9.05 - 9.65
Tribasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 - —
bgs., l.c.l., frt. equald 100 lbs. 4.80 - 5.40
Sodium phosphate in dms., 60c. to 80c. higher than bgs.
Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald, 100 lbs. 11.10 - —
bgs., l.c.l., works 100 lbs. 11.85 -12.35
Ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½ - —
bgs., l.c.l., frt. equald 100 lbs. 7.92½ - 8.52½

Sodium salicylate, USP, dms. lb. .78 - .80
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
bgs., l.c.l., dlvd. zone 2 100 lbs. 4.35 - 4.60
Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 3 100 lbs. 4.75 - 4.90
bgs., l.c.l., dlvd. zone 4 100 lbs. 5.35 - 5.60

Sales zones are: (1) Atl. states E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S C., Tenn and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La and Miss. No of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont. Nev., N. M., Utah, Wyo and El Paso, Tex.

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs 5.00 —
bgs., l.c.l., works 100 lbs 5.75 —
dms., c.l., works 100 lbs 5.50 —
dms., l.c.l., works 100 lbs 6.25 —
Sodium silicate, liq., 40° Be, 1:3.2, turbid. dms. c.l., works 100 lbs 1.55 —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks, works 100 lbs 1.20 —
47°Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 3.00
tanks, works 100 lbs 1.90 —
52° Be. turbid. 1:2.4, dms., c.l., works 100 lbs. 2.65 —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .075 - —
bgs., l.c.l., works lb. .079 - —
Sodium silicofluoride in dms., 0.4c per lb. higher.
Sodium stannate, dms., works, frt alld E. .608 - .668
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½ - —
Tech., anhyd., bgs., c.l. dlvd E. ton 52.00 —
detergent, rayon grade, bgs., c.l. works ton 34.00 - —
bulk, c.l., works ton 31.00 - —
USP, cryst., fib. dms lb .17½ .18
gran., fib. dms lb .17½ .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works lb .06¾ - —
dms., l.c.l., works lb .07¾ - —
Liq., 40-44%, tanks, works, 100% basis ton 120.00 - —
Sodium sulfide, flake, dms., c.l., works, E. frt. equald lb. .05½ - —
dms., l.c.l., same basis lb. .06½ - —
Fused, bbls., c.l., works, E., frt. equald lb. .05 - —
bbls., l.c.l., same basis lb .06 - —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs. 7.55 - —
bgs., l.c.l. same basis 100 lbs. 7.95 - —
Tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40%, dms., c.l., works lb. .04 - —
dms., l.c.l., works lb. .05 - —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½ - —
Sodium thiosulfate, tech. (see Sodium hyposulfite). lb. .14¼ - —
ctns., 5-ton lots, works lb. .14½ - —
ctns., 1-ton or less, works lb. .14¾ - —
Sodium toluene sulfonate, dms., c.l. or t.l lb. .33 - —
Sodium titanate, ctns., c.l., works, dms., l.c.l. lb. .42 - —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld E. lb. .37½ - —
100-lb. dms., l.c.l., frt. adjusted, E lb. .39½ - —
50-lb. dms., c.l., frt. alld. E lb. .38 - —
50-lb. dms., l.c.l., frt. adjusted, E lb. .40 - —
10-lb. cns., c.l., frt. alld. E lb. .44 - —
10-lb. cns., l.c.l., frt. adjusted, E lb. .46 - —

Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½ - —
bgs., l.c.l., same basis 100 lbs. 8.27½ - 8.87½
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
bgs., l.c.l., works 100 lbs. 9.70 -10.10
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½ - —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .35
Solvent naphtha, petroleum, partial aromatic, 205°-282° F. b.r., 41°C. m.a.p., tanks, New York, New Jersey gal. .215 - —
212°-278°F. b.r., 43°C. m.a.p., tanks, New Jersey gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., tanks, New Jersey gal. .29 - —
224°-230°F. b.r., 48°C. m.a.p., tanks, Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., tanks, New Jersey gal. .29 - —
262°-325°F. b.r., 41.5°C. m.a.p., tanks, Houston gal. .25 - —
287°-386°F, b.r., 31°C. m.a.p., tanks, New Jersey gal. .29 - —
310°-314°F b.r., 13.5°C. m.a.p., tanks, Texas City gal. .33 - —
310°-348°F. b.r., 17°C. m.a.p. tanks, New York, New Jersey gal. .35 - —
320°-360°, b.r. 10°C., m.a.p., tanks, New York, New Jersey gal. .33 - —
324°-349°F. 37°C., m.a.p., tanks, Houston gal. .33 - —
341°-390°F. b.r., 35°C., m.a.p., tanks, New Jersey... gal .27 - —

Solvent naphtha, petroleum, partial aromatic, 352°-413°F, b.r., 30°C., m.a.p., tanks, Houston gal.	.33	—
358°-401°F. b.r., 25°C., m.a.p., tanks, New York, New Jersey gal.	.39	—
364°-404°F b.r., 19°C., m.a.p., tanks, New York, New Jersey gal.	.423	—
367°-418°F. b.r., 19.6°C., m.a.p., tanks, New York, New Jersey gal.	.33	—
Sorbitan monostearate, fib. dms., 20,000-lb lots, works lb.	.32	—
fib. dms., 10,000 to 20,000-lb. lots, works lb.	.34	—
fib. dms., smaller lots, works lb.	.37	.39
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb.	.33	—
Sorbitan tristearate, fib. dms., 10,000 to 20,000-lb. lots, works lb.	.35	—
fib. dms., smaller lots, works lb.	.38	.40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb.	.23	—
dms., 1 to 5-ton lots, works, lb.	.25	.26
Powd., dms., 1 to 5-ton lots, works lb.	.38	—
Soln., coml., aqueous, dms., c.l., works lb.	.24¼-	—
dms., ton lots, works lb.	.25 -	—
dms., smaller lots, works lb.	.25¼-	—
tanks, works lb.	.23¼-	—
NF, reg., 70% aqeous, dms., c.l., works lb.	.16 -	—
dms., ton lots, works lb.	.16¾-	—
dms., smaller lots works lb.	.17 -	—
tanks, works lb.	.15 -	—
Soybean meal, 44% bulk, Decatur ton.	51.00 -	—
Soybean oil, crude, tanks, Decatur lb.	.11⅜-	—
Foots, soapstock, acid 95% tanks, N. Y. lb.	.07¾-	—
Refd., alkali, dms. lb.	.1693-	.1725
tanks lb.	.1493-	—
clarified, dms. lb.	.1562-	.1575
tanks lb.	.1362-	—
salad, dms. lb.	.16¾-	.17
tanks lb.	.14⅛-	—
Soybean oil acids, dbl. dist., dms. lb.	.19½-	.22
tanks lb.	.17 -	—
Single-distilled, dms lb.	.18¼-	.20¾
tanks lb.	.15¾-	—
Soybean pitch, dms., works lb.	.05	.05¼
Soybean protein, chemically isolated, bgs., c.l., works lb.	.23 -	—
Mechanically refd., bgs., l.c.l., works lb.	.066 -	—
Sparteine sulfate cns. oz.	.80 -	.90
Spearmint leaves, dom., bls. oz.	.75 -	—
Spearmint oil, dms. lb.	4.50 -	4.75
Sperm oil, bleached, winter, 45°, dms lb.	.1823-	.1850
tanks lb.	.1650-	—
Nat., winter, 45°, dms. lb.	.1725-	.1750
tanks lb.	.1550-	—
Spermaceti wax, blocks, cs lb.	.31 -	.34
Cakes, cs lb.	.32 -	.36
Spruce extract, liq., reg. tanks, works lb.	.01¾-	—
Powd., super, bgs., c.l., works, lb.	.05¼-	—
bgs., l.c.l., works lb.	.05½-	—
Spruce oil, cns., dms. lb.	2.10 -	3.50
Squill, white, bls. lb.	.16 -	.18
White, powd., bbls., bxs. lb.	.17 -	.20
St. John's bread, edible, bls. lb.	.13 -	.15
Stannic chloride, anhyd., dms., works lb.	.767 -	.777
Stannic oxide, dms., dlvd. E lb.	1.02 -	1.03
Stannous chloride, anhyd., dms., works lb.	.965 -	1.459
Hydrous, cryst., dms., works lb.	.83⅜-	.84⅜
Stannous sulfate, dms., works lb.	1.021 -	1.041
Starch, corn, pearl, paper bgs., c.i., 100 lbs.	7.32 -	—
paper bgs., l.c.l. 100 lbs.	7.47 -	—
Powd., paper bgs., c.l. 100 lbs.	7.44 -	—
paper bgs., l.c.l. 100 lbs.	7.59 -	—
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.		
Starch, potato, dom., idaho, bgs., c.l., works lb.	.06½-	—
Dom., Maine, bgs., c.l., works lb.	.06¼-	—
bgs., ex whse, New York lb.	.08¼-	.09¼
Starch, rice, bgs., l.c.l. lb.	.15½-	.16
Starch, wheat, bgs. lb.	.08½-	.09
Star root (see Helonias root).		
Stargrass root (see Aletris root).		
Stavesacre seed, bgs. lb.	.60 -	.61
Stearic acid, dbl. pressed, bgs. lb.	.16½-	.19
Single-pressed, bgs. lb.	.16 -	.18½
Triple pressed, bgs. lb.	.18¾-	.21¼
Stearine, oleo (see Oleostearine).		
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal.	.18 -	—
tanks, western Pennsylvania, gal.	.16 -	—
tanks, group 3 gal.	.13375-	—
tankwagon, Boston gal.	.20 -	—
Chicago gal.	.299 -	—
Cleveland gal.	.23½-	—
Los Angeles, ex tax gal.	.199 -	—
Newark gal.	.19 -	—
New York gal.	.19 -	—
Philadelphia gal.	.19½-	—
Pittsburgh gal.	.19 -	—
Stramonium leaves, bgs. lb.	.18 -	.20
Streptomycin hydrochloride, bulk, gram.	.0850-	.0875
Streptomycin sulfate, bulk gram.	.0850-	.0875
Strontium bromide, NF, 150-lb. fib. dms lb.	.34 -	—
Strontium carbonate, pure, dms., 5-ton lots or more, works, lb.	.35 -	—
dms., 1-ton lots, works lb.	.37 -	—
Tech., dms., works lb.	.19 -	—
Strontium chromate, bbls., works, lb.	.45 -	—
Strontium iodide, jars, 25-lb. lots, lb.	3.40 -	—
Strontium nitrate, bgs., c.l., works, 100 lbs.	11.00 -	—
bgs., l.c.l., works 100 lbs.	12.00 -	—
Strontium salicylate, NF, dms lb.	1.88 -	—
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton.	56.70	-66.15
Strophanthin G (see Ouabain, USP).		
Strophanthin K, bots oz.	25.00	-25.50
Strophanthus seed, Kombi, biologically tested, bgs lb.	3.50	3.75
Styrax, USP, cs lb.	.78 -	.80
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld, lb.	.18½-	—
dms., l.c.l., same basis lb.	.20½-	—
tanks, same basis lb.	.16 -	—
Syn. rubber grade, 99%, tanks, bulk, contract lb.	.124 -	—
c.l., t.l., same basis lb.	.15 -	—
l.c.l., same basis lb.	.17 -	—
Above contract prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.		
Styrolyl acetate, bots lb.	1.45	1.70
Succinic acid, purif., cryst., bbls., works lb.	.62 -	.75
Sucrose, refd., white, bgs., refy., E lb.	.0885-	—
Sucrose octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb.	.84 -	—
Sugar (see Sucrose).		
Sugar cane wax, dom., refd., slabs, 50-lb. ctns., works lb.	.65 -	.75
60-lb. ctns., spot lb.	.67¼-	.72¼
Sulfabenzamide, dms kilo.	8.80 -	9.90
Sulfabenzamide-sodium, dms kilo.	9.00 -	10.10
Sulfacetamide, USP, fib. dms kilo.	7.70 -	8.80
Sulfacetamide-sodium, USP, fib. dms kilo.	8.15 -	9.25
Sulfadiazine, USP, microcrystals, dms kilo.	23.35	-24.45
USP, powd., dms kilo.	22.60	-23.70
Sulfadiazine-sodium, USP, dms. kilo.	24.80	-25.90
Sulfaguanidine, NF X, dms kilo.	5.50 -	6.60
Sulfamerazine, USP, microcrystals, dms kilo.	23.50	-24.60
Sulfamerazine-sodium, USP, powd., dms kilo.	24.80	-25.90
Sulfamethazine, microcrystals, USP XV, dms kilo.	19.65	-20.75
Powd., dms kilo.	18.75	-19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.	16.00 -	—
dms., l.c.l., l.t.l., works 100 lbs.	17.50	-18.50
Sulfanilamide, NF X, 30-80 mesh, dms kilo.	3.05 -	3.50
NF X, microcrystals, dms kilo.	3.79 -	4.20
powd., dms kilo.	2.85 -	3.30
Sulfanilamide quinoxaline veterinary, dms kilo.	14.12	-14.85
Sulfanilic acid, tech., dms., c.l., frt. alld lb.	.21 -	—
dms., l.c.l., frt. alld lb.	.23 -	—
Sulfapyridine, USP XV, powd., bots., tins kilo.	15.45	-16.55
Sulfapyridine-sodium, monohydrate, dms kilo.	6.25 -	6.60
Sulfathiazole, NF X, powd., dms. kilo.	5.50 -	5.85
Sulfathiazole, NF X, microcrystals, dms kilo.	6.25 -	6.60
Sulfathiazole-sodium, NF X, dms. kilo.	6.05 -	6.40
Sulfur, coml., flour, bgs., mines, 100 lbs.	2.55 -	—
bbls., mines 100 lbs.	3.40 -	—
Coml., lump, bgs., mines 100 lbs.	2.45 -	—
bbls, mines 100 lbs.	3.00 -	—
Crude, bulk, f.o.b. cars, mines, long-ton.	26.50 -	—
Crude, bulk, export, f.o.b. vessels Gulf ports long-ton.	28.00 -	—
bulk, dom. and Canada, f.o.b vessels Gulf ports long-ton.	28.00 -	—
bulk, imp., Mexican, dark or blended, f.o.b. vessel, Coatzacoalcos long-ton.	25.00 -	—
Sulfur, refd., flowers, NF, bgs., mines 100 lbs.	4.75 -	—
bbls., mines 100 lbs.	6.10 -	—
Refd., flour, light, bgs., mines 100 lbs.	4.35 -	—
bbls., mines 100 lbs.	5.35 -	—
lump, bgs., mines 100 lbs.	4.05 -	—
rolls, bgs., mines 100 lbs.	4.60 -	—
bbls., mines 100 lbs.	5.35 -	—
salt block, bgs., mines 100 lbs	4.25 -	—
virgin block, bbls., mines, 100 lbs.	4.30 -	—
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs.	2.65 -	—
bbls., mines 100 lbs.	3.90 -	—
Sulfur, rubbermakers, 98-100% passing through 325 mesh, bgs., 100 lbs.	2.75 -	—
bbls., mines 100 lbs.	4.00 -	—
Rubbermakers, refd., bgs., mines, 100 lbs	4.00 -	—
bbls., mines 100 lbs.	5.15 -	—
treated, 2.5% mineral oil, bgs., mines 100 lbs	2.95 -	—
bbls., mines 100 lbs.	4.20 -	—
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb.	.04½-	—
ret. dms., t.c.l., same basis lb.	.05¼-	—
tanks, same basis lb.	.04 -	—
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb.	.10	.12
multi-unit cars, works lb.	.0535-	—
tanks, works lb.	.045 -	—
Refrigeration, 150-lb. cyls., dlvd. lb.	.30 -	—
Sulfur monochloride, 55-gal. non-ret, dms., c.l., frt. equald lb.	.04½-	—
55-gal. non-ret. dms., t.c.l., same basis lb.	.05¼-	—
tanks, same basis lb.	.04 -	—
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs.	2.00 -	—
cbys., t.c.l., works 100 lbs.	2.45 -	—
tanks, works ton.	18.60 -	—
Sulfuric acid, 66° Be, cbys., c.l., works 100 lbs.	2.25 -	—
cbys., t.c.l., works 100 lbs.	2.55	3.35
tanks, works ton.	22.35 -	—
98%, tanks, works ton.	23.50 -	—
99-100%, tanks, works ton.	23.95 -	—

do you—

then check the advantages of Sodium Methylate from Olin Mathieson—

This high purity product contains 95% $NaOCH_3$ when packed, with not more than 2% of inorganic alkalies (sodium hydroxide and sodium carbonate) and not more than 3% methanol.

Mathieson sodium methylate is shipped from Niagara Falls, N. Y. It is available in 25, 50 and 200-lb. drums and in 10-lb. pails (in dry form) and as a 25% solution in methanol in drums (425 lbs. net).

Ask your Olin Mathieson representative for further information about Mathieson sodium methylate. Call or write today.

MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

4981

INORGANICS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sulfate of Alumina • Sulfur (Processed) • Sulfuric Acid

ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants

Sulfuric Acid—Tolu Balsam

Sulfuric acid, CP, NF, consumers' cbys, c.l. frt. equald lb. .12¾ - —
consumers' cbys., l.c.l., same basis lb. .14¼ - .14¾
8-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼ - —
5-pt. bots. extra, cs., l.c.l., same basis lb. .18¼ - .18¾

Sulfuric acid, fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —

Sumac leaves, 28% tannin, bgs., ex dock ton 135.00 Nom.
28% tannin, grd., bgs., ex dock ton 130.00 Nom.

Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton .90 - .93
bulk, c.l. Carteret, N. J. unit-ton .90 - .93

Superphosphate, triple 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton .98 - —

Sweet birch oil, USP, northern, cns lb 4.25 - 9.50
USP, southern, cns. lb 2.30 - 2.75

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —

Talc, dom., fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
bgs., l.c.l., works ton 31.00 - 36.00
Dom., fibrous, New York, 99.5%, 325 mesh, bgs., c.l., works. ton 31.00 - —
bgs., l.c.l., works ton 34.00 - —
99.95% micronized, bgs., works. ton 38.00 - —
Dom., ord., Calif., grad., bgs., c.l., works ton 33.00 - 39.50
ord., Vermont, off-color, grd., bgs., c.l., works ton 19.40 - —
bgs., l.c.l., works ton 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton 20.00 - 35.00

Tall oil, crude, dms., c.l., works lb. .04½ - —
tanks, works lb. .02½ - .03
Dist., dms., c.l., works lb. .07¾ - —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .06½ - —
Refd., dms., c.l., works lb. .06¾ - —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½ - .06
Tall oil acids, dms., c.l., works lb. .10½ - .12
dms., l.c.l. lb. .11 - .12½
tanks, works lb. .08½ - .10

Tall pitch, dms., c.l., works ton 50.00 - 70.00
tanks, works ton 30.00 - 40.00

Tallow, edible, tanks, dlvd lb. .12½ - .12¾
inedible, fancy, bleachable, tanks, dlvd lb. .08½ - .08⅝
fancy, guaranteed, dms., f.a.s lb. .10 - .10⅛
No. 1, tanks, dlvd. lb. .07⅞ - .08
prime, tanks, dlvd. lb. .08¼ - .08⅜
special, tanks, dlvd. lb. .08 - .08⅛
sulfonated, 25%, bbls., l.c.l. lb. .08⅝ - .08⅞
50%, bbls., l.c.l. lb. .09⅝ - .10⅛

Tallow acids, dist., dms. lb. .17 - .19½
tanks lb. .14½ - —
Hydrogenated, dms. lb. .15½ - .18

Tallow oil, acidless, dms., c.l. lb. .14½ - —
cms., l.c.l. lb. .15½ - .17

Tangerine oil, Floridian, dms. lb. 2.00 - 2.80

Tankage, animal, feeding, 9-11% ammonia, bulk, unit-ton 5.00 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk, unit-ton 5.75 - —

Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.10
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 2.01

Tech., dms. lb. 1.05 - —

Tansy oil, dms. lb. 7.50 - 9.50

Tapioca flour, Brazilian, bgs., ex whse lb. .12½ - .13½
Siamese, first quality, same basis. lb. .07 - .08

Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½ - —
dms., l.c.l., same basis gal. .55½ - —
tanks, same basis gal. .43½ - —
25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —

Tar, coal (see Coaltar).

Tartar emetic (see Antimony potassium tartrate).

Tartaric acid, dom., USP, 230 or 250-lb. dms., c.l. lb. .49 - —
230 or 250-lb. dms., 10,000-lb. lots, 1 shipt lb. .49¼ - —
230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb. dms. lb. .51 - —
Imp., bgs lb. .36 - .40

Terpine glycol ether, dms., c.l., works lb. .23½ - —
dms., l.c.l., works lb. .25½ - —
tanks, works lb. .22 - —

Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —

Terpineol, dms., l.c.l., dlvd. E lb. .23¾ - —
Extra, dms. lb. .41 - .60
Prime, dms. lb. .30 - .45

Terpinyl acetate, extra, cns., dms. lb. .60 - .75
Prime, dms. lb. .55 - .70

Terpinyl propionate, dms. lb. 1.75 - 3.00

Terra alba (see Gypsum).

Testosterone, USP, 100-gm. lots, bots gram. .70 - —

Testosterone proprionate, USP, 100-gram lots, gram lots, bots, gram. .68 - —

Tetrachloroethane, dms., works lb. .14½ - —

Tetrasodium pyrophosphate (see Sodium pyrophosphate).

Tetrachloroethylene, tech. (see Perchloroethylene).

Tetrachloroethylene USP, 55-gal. dms., c.l., t.l., works lb. .20½ - —
dms., l.c.l., works lb. .22 - .23½

Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½ - —
dms., l.c.l., dlvd. E lb. .62½ - —

Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —

Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½ - —
dms., l.c.l., dlvd. E lb. .54½ - —
tanks, dlvd. E lb. .51 - —

Tetrahydrofuran, dms., c.l., t.l., works lb. .36½ - —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —

Tetrahydrofurfuryl alcohol, dms., c.l. t.l., Memphis, Tenn. lb. .34½ - —
dms., l.c.l. l.t.l., Memphis, Tenn. lb. .35½ - —
dms., c.l., t.l., Newark, N. J lb. .36½ - —
dms., l.c.l., l.t.l., Newark, N. J. lb. .37½ - —
tanks, dlvd. E. of Denver lb. .34 - —
tanks, dlvd. W. of Denver lb. .35 - —

Tetrapotassium phosphate (see Potassium phosphate).

Thallium metal, dlvd. lb. 12.50 - 15.00

Thallium sulfate, 99%, bots. dlvd lb. 8.00 - 13.00

Theobromine, NF, fib. dms lb. 4.50 - —

Theobromine and sodium acetate, USP, fib. dms lb. 4.75 - —

Theobromine sodio-salicylate, NF, fib. dms lb. 3.90 - —

Theophylline, anhyd., or USP, 100-lb. dms lb. 3.65 - —

Thiamine hydrochloride, USP, reg., fib. dms kilo. 40.00 - —
USP, ampule grade fib. dms. kilo. 42.00 - —

Thiamine mononitrate, USP, fib. dms kilo. 40.00 - —

Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots lb. .74 - —

Thiodiphenylamine (see Phenothiazine).

Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.10 - —
Tungstated, PTMA, kgs., works. lb. 6.40 - —

Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55

Thiosalicylic acid, purif., dms., 1,000-lb, lots, works lb. 4.00 - —

Thiourea, tech. bgs. t.l., frt. alld. lb. .33 - —
bgs., l.c.l., frt. alld lb. .35 - —

Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —

dl-Threonine, bots., 1-kilo. lots kilo. 450.00 - 500.00

Thyme oil, NF, red., cns., dms lb. 1.45 - 1.75
white, cns. lb. 1.70 - 2.00
Tech., white, cns lb. .40 - 1.85

Thymol, fib. dms lb. 2.60 - 3.00

Thymol iodide, NF, dms. lb. 7.30 - —

Timbo root, (see Cube root).

Tin chloride (see Stannous chloride, anhyd.).

Tin crystals (see Stannous chloride, hydrous).

Tin metal (Straits) lb. .94½ - —

Tin oxide (see Stannic oxide).

Tin sulfate (see Stannous sulfate).

Tin tetrachloride, anhyd (see Stannic chloride, anhyd.).

Titanium pigment, calcium-rutile base, reg., bgs., c.l., dlvd. lb. .09¼ - —
bgs., l.c.l., works lb. .09¾ - —
Calcium-rutile base, high-tinting, dms., c.l lb. .09 - —
dms., l.c.l lb. .09½ - —
Titanium dioxide, anatase, chalk-resistant, bgs., c.l., dlvd. lb. .25½ - —
bgs., l.c.l., dlvd lb. .26½ - —
Anatase, ceramic, bgs., c.l., dlvd. lb. .23½ - —
bgs., l.c.l., dlvd lb. .24½ - —
reg., bgs., c.l., dlvd lb. .23½ - —
bgs., l.c.l., dlvd lb. .24½ - —
Granular, nat., bgs., c.l., f.o.b. Jacksonville, Fla ton. 180.00 - —
5 ton lots, Niagara Falls, N. Y. ton. 205.00 - —
bgs., ton lots, same basis. ton. 215.00 - —
Rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½ - —
bgs., l.c.l., dlvd. E lb. .28½ - —
Milled metallurgical titanium dioxide $7.50 per ton higher.

Titanium hydride, powd., dms., works lb. 8.10 - 9.00

Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½ - .29
tanks, works lb. .20 - —

Tobias acid, bbls., frt. alld lb. 81 - —

d-a-Tocopherols, mixed, NF, conc., pure basis, bots kilo. 91.00 - —

d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 166.00 - —

d-a-Tocopheryl acid succinate, cryst. bots kilo. 148.00 - —

dl-a-Tocopherol, bots kilo. 134.20 - —

dl-a-Tocopheryl acetate, bots kilo. 122.00 - —

25% dry, powd., bots kilo. 30.50 - 32.00

o-Tolidine base, dry, kgs., 100% basis lb. 1.40 - —
Paste, kgs., 100% basis lb. 1.35 - —

Toluol

Toluol quotations, both coaltar and petroleum, may now be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.35 - —

Tolu balsam, cns. lb. 4.25 - 5.00

Her nose knows her preference in paints — and she follows her nose to the store that sells paints made with odorless solvents. You can produce superior odorless paints with Sinclair's team of top-quality Odorless Solvents. Light and Heavy Odorless Solvents are available in full and split tank car quantities. For your protection against contamination, Sinclair maintains a fleet of special tank cars, used exclusively in Odorless Solvent service. Prompt shipments to meet your production requirements are assured.

Sinclair Odorless Solvent Light – Distillation Range 345-400°F
Sinclair Odorless Solvent Heavy – Distillation Range 375-465°F

For samples, prices, and complete information on Sinclair Odorless Solvents, write or call . . .

SINCLAIR CHEMICALS, INC.

(Affiliate of Sinclair Refining Company)

600 Fifth Avenue, New York 20, N. Y. – Phone Circle 6-3600
155 North Wacker Drive, Chicago 6, Illinois – Phone Financial 6-5900

Toluene, coaltar, indust. or nitration, tanks, works:—			
Bethlehem, Pa	gal.	.32	—
Birmingham, dist	gal.	.32	—
Chicago, dist	gal.	.32	—
Cleveland, dist	gal.	.32	—
Geneva, Utah	gal.	.26	—
Johnstown, Pa	gal.	.32	—
Lackawanna, N. Y	gal.	.32	—
Lone Star, Tex	gal.	.33	—
Lorain, Ohio	gal.	.32	—
Middletown, Ohio	gal.	.33½	—
Minnequa, Colo	gal.	.32	—
Philadelphia dist	gal.	.32	—
Pittsburgh dist	gal.	.32	—
Sparrow's Point, Md	gal.	.32	—
Terre Haute, Ind	gal.	.34	—
Youngstown, Ohio	gal.	.32	—
Toluene, petroleum, indust., 2° tanks, works:			
Albany, N. Y.	gal.	.32	—
Bayonne, N. J.	gal	.31	—
Baytown, Tex.	gal.	.2925	—
Chicago, Ill	gal.	.32	.35
Detroit, Mich	gal.	.32	.35
Houston, Tex.	gal.	.2925	—
Philadelphia, Pa.	gal	.31	—
Providence, R. I.	gal.	.32	—
Wood River, Ill.	gal.	.32	—
p-Toluenesulfonamide, powd., dms., works	lb.	.70	—
p-Toluenesulfonic acid, dms., c.l., t.l., works	lb.	.17	—
dms., t.c.l., works	lb.	.18	—
p-Toluenesulfonic acid, monohydrate, dms., c.l., or t.l	lb.	.90	—
dms., 125 lbs. to t.l	lb.	1.00	—
m-Toluidine dms., c.l., works, frt. alld	lb.	.79	—
dms., t.c.l., same basis	lb.	.80	—
tanks, same basis	lb.	.78	—
o-Toluidine, dms., c.l., works, frt. alld	lb.	.23	—
dms., t.c.l., same basis	lb.	.24	—
tanks, same basis	lb.	.22	—
p-Toluidine, flake, dms., frt. alld	lb.	.64	—
Solid, dms., frt. alld	lb.	.60	.61
o-Toluidine-m-sulfonic acid, frt. alld.	lb.	.70	—
p-Toluidine-m-sulfonic acid, bbls., works	lb.	.92	1.04
Toluidine red toner, deep shades, kgs., works	lb.	1.70	—
Light shades, kgs., works	lb	1.70	—
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld	lb.	.97	—
fib. dms., t.c.l., frt. alld	lb	1.00	—
Powd., fib. dms., same basis	lb.	1.00	—
Tonka beans, Angostura, cks	lb.	No prices	
Brazilian, Surinam, cs	lb	1.35	—
Totaquine 100-oz. lots, cns	oz.	.42	—
Toxaphene, dms., c.l., t.l., works	lb.	.22	—
dms., t.c.l., t.t.l., works	lb.	.28	—
Tragacanth gum, No. 1, ribbons, cs	lb.	4.25	- 4.50
No. 2, cs.	lb.	3.40	- —
No. 3, cs.	lb.	3.00	- 3.10
USP. powd., bbls.	lb.	1.25	1.38
Triacetin, dms., c.l., divd. E. of Rockies	lb.	.39	—
dms., t.c.l., same basis	lb.	.40	—
tanks, same basis	lb.	.37	—
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E of Denver	lb.	.42½	—
non-ret. dms. t.c.l., frt. alld E. of Denver	lb.	.43½	—
tanks, frt. alld. E. of Denver	lb.	.40	—
Tributyl phosphate, dms., c.l., works	lb.	.52½	—
dms., t.c.l., same basis	lb.	.53½	—
tanks, same basis	lb.	.50	—
Tributylamine, dms., c.l., works	lb.	.67½	—
dms., t.c.l., same basis	lb.	.68½	—
tanks, same basis	lb.	65	—
Trichloroacetic acid, bots	lb.	2.00	2.50
Trichlorobenzene, dms., c.l., frt. alld. E.	lb.	.14½	—
dms., t.c.l., frt. alld E.	lb.	.15½	—
tanks, frt. alld E.	lb.	.13	—
Trichlorobenzene prices in the West 1¾c. higher.			
1,1,1-Trichloroethane, dms., c.l., works	lb.	.13½	—
dms., t.c.l., works	lb.	.14½	—
tanks, works	lb.	.11½	—
Trichloroethylene, dms., c.l., or t.l., works, frt. equald	lb.	.13	—
dms., t.c.l., frt. alld	lb.	.15	.16¾
tanks, works, frt. equald	lb	12	—
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate 65% soln. ret. chys works frt adjusted	lb.	40	1.45
Tricresyl phosphate, coaltar, dms., c.l., divd	lb.	.35	—
dms. t.c.l., divd.	lb.	.36	—
tanks, divd	lb.	.32½	—
Petroleum, dms., c.l., divd	lb.	.34½	—
dms., t.c.l., divd.	lb.	.35½	—
tanks, divd	lb.	.32½	—
Tridecyl alcohol, mixed isomers, dms., divd.	lb.	.26½	—
dms., t.c.l., divd.	lb.	.27½	—
tanks, divd.	lb.	.24	—
Triethanolamine, dms., c.l., divd. E.	lb.	.24½	—
dms., t.c.l., same basis	lb.	.25½	—
tanks, same basis	lb.	.22	—
Triethylamine, dms., c.l., works, divd. E	lb.	.49	—
t.c.l., same basis	lb.	.50	—
tanks same basis	lb.	.46½	—
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld E. of Denver	lb.	.45¾	—
non-et. dms., t.c.l. frt alld. E. of Denver	lb.	.46¾	—
tanks, frt. alld. E. of Denver	lb	.43¾	—
Triethyl phosphate, dms., c.l., divd.	lb.	.40½	—
dms., t.c.l., divd.	lb.	.41½	—
tanks, divd	lb.	.38	—
Triethylene glycol, dms., c.l., divd. E	lb.	.21	—
dms., t.c.l., divd. E.	lb.	.22	—
tanks, same basis	lb.	.18½	—
Triethylenetetramine, dms., c.l., divd. E	lb.	.51½	—
dms., t.c.l., divd. E.	lb.	.52½	—
tanks, divd. E.	lb.	.49	—
Tri-isopropanolamine, dms., c.l., divd. E	lb.	.23¼	—
dms., t.c.l., divd. E.	lb.	.24¼	—
tanks, divd. E	lb.	.20¾	—
Trimethylamine, 25-40% soln., dms., c.l., works, frt. equald., 100% basis	lb.	.35	—
Trimethylamine, 25-40% soln., dms., t.c.l., works, frt. equald, 100% basis	lb.	.35½	—
tanks, works, frt. equald, 100% basis	lb.	.26	—
Trioxane, pure, dms. c.l. t.l., works.	lb.	.50	—
dms., t.c.l., works	lb.	.51½	—
Tripentaerythritol, bgs. t.c.l., works.	lb.	.33	—
Triphenyl phosphate, bbls., c.l., frt. equald	lb.	.40	—
bbls. t.c.l. frt. equald	lb.	.41	—
Triphenylguanidine, bbls., works	lb.	.90	—
tanks, same basis	lb.	.18½	—
Tripropylene glycol, dms., c.l., frt. alld. E	lb.	.20½	—
dms. t.c.l. frt. alld. E	lb.	.21½	—
Tripropylene glycol prices 1c. per lb. higher in West.			

Trisodium phosphate (see Sodium phosphate tribasic).			
dl-Tryptophane, fib. ctns., works.	lb.	75.00	—
tung oil, dms., c.l., New York	lb.	.25¼	—
dms., t.c.l., same basis	lb.	.25½	.25¾
tanks, New York	lb.	.23¾	—
tanks, domestic, mills	lb.	.23	Nom.
Tungsten metal powd. 2-5 microns, dms., works	lb.	4.10	4.20
Tungstic acid, tech. dms., 1,000-lb. lots, works	lb.	3.00	—
dms., smaller lots, works	lb.	3.15	3.50
Tuscan red, bbls. frt equald	lb.	.26	.32
Turkey red bbls., works	lb.	.62	—
Turpentine, gum (see Protective Coatings market., Naval Stores).			
Turpentine oil, NF cns. dms	lb.	.28	45
Tyrothricin, USP, bots	gram.	.55	58

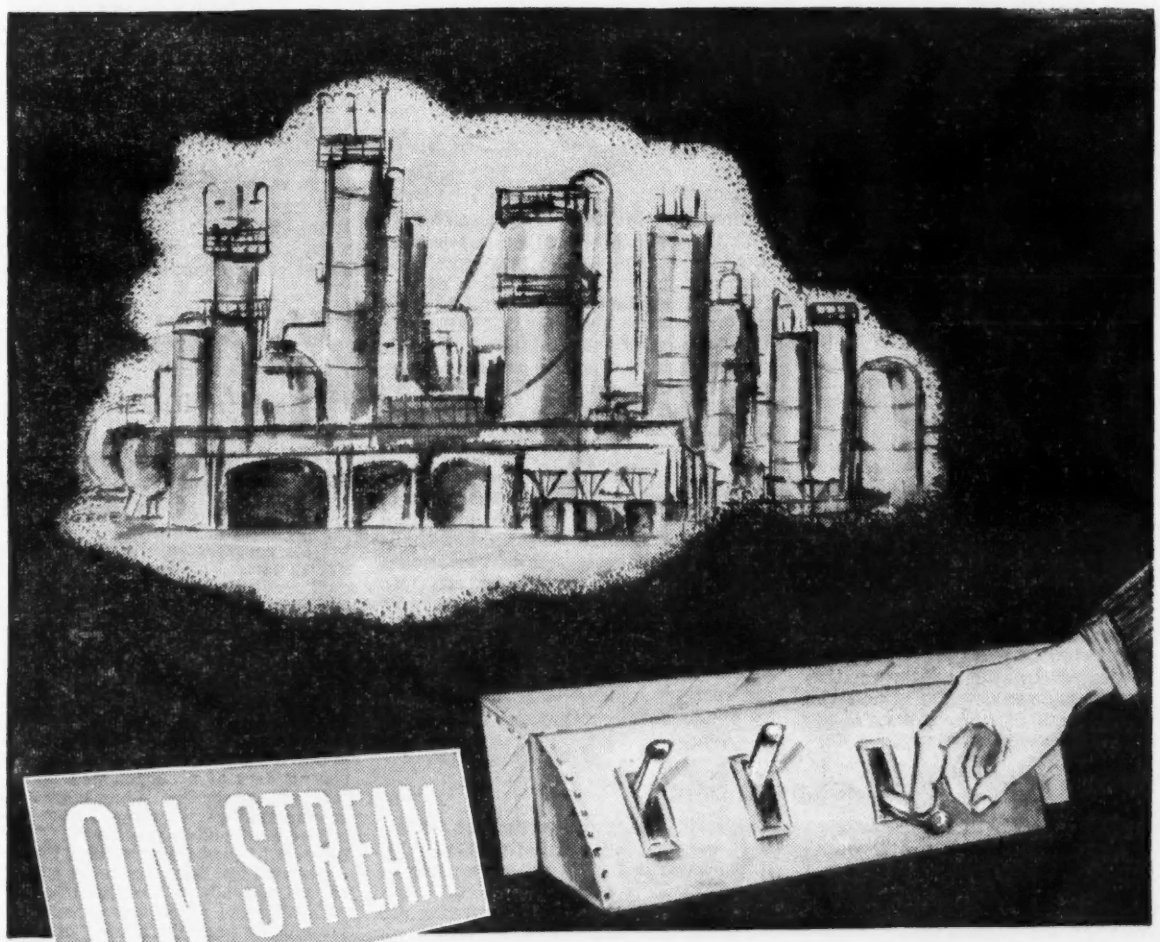
U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls. divd. N. of Tenn. and N. C. E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb.	.35	39½
Ultramarine blue, jobbing types, bbls., same basis	lb.	.19	—
Regular types, dry bbls., same basis	lb.	.22½	35
Ultramarine blue divd. prices ½c. higher Ala., Fla., Ga., La., (Shreveport 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines Kansas City, Lincoln Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.			
Umber pigment, burnt, American, bgs., c.l. works	lb.	.07	.07¾
bgs., t.c.l., works	lb.	.07¼	.08
Turkey-type, bgs. c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y	lb.	.07¾	—
Raw, American, bgs. works	lb.	.07½	.08¼
Turkey-type, bgs. works	lb.	.06¾	.07
Undecylenic acid, dms.	lb.	1.43	—
Unicorn root, false (see Helonias root).			
Unicorn root, true (see Aletris root).			
Urea, 46% N, indust., bgs., c.l., t.l., divd. E	ton.	125.00	—
bgs., t.c.l., divd E., ex whse.	ton.	145.00	—
45% N, agricultural, bgs., c.l., (30 tons) divd. E	ton.	110.00	—
Urea-ammonia liquor A and B grades, N basis, tanks, Belle W Va	ton.	126.00	—
C grade, tanks, same basis	ton.	124.50	—
37 grade, tanks, same basis	ton.	153.00	—
Urethane USP, dms., t.l., f.o.b., works	lb.	.65	—
dms., l.t.l., same basis	lb.	.70	—
Uva-ursi leaves, bls	lb.	.17	.19

V

Valonia beards, 40-42 tannin, bgs., ex dock	ton.	90.00	Nom.
Valonia cups, 28-30% tannin, bgs., ex dock	ton.	65.00	67.00
Valonia extract, powd., 63% tannin, bgs., ex dock, duty extra.	lb.	.11	—
Vanadium pentoxide, tech., dms., works	lb.	1.23	1.33
Vandyke brown, bbls., works	lb.	.09½	12
Vanilla beans, Bourbon, tins	lb	8.35	8.75
Mexican, cuts, tins	lb	7.50	7.75
whole, tins	lb	8.25	8.50
Tahiti, cs.	lb	7.00	—
Vanillin, ex eugenol, tins, 25-lb lots	lb.	6.50	6.75
tins, smaller lots	lb	6.90	7.25
Ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more	lb.	3.10	—
100-lb. fib. dms., smaller lots.	lb.	3.15	3.25
Venetian red, jobbing, bgs., works.	lb.	.0475	—
20%, bgs., works	lb	.0525	—
25%, bgs., works	lb	.0575	—
30%, bgs., works	lb	.06	—
35%, bgs., works	lb	.0625	—
40%, bgs., works	lb	.0675	—
Vetiver oil, Bourbon, cns.	lb.	11.75	11.90
Haitian, cs.	lb.	9.25	9.40
Java, cns	lb	18.50	20.00
Victoria blue toner, molybdated, PMA, 250-lb. bbls., divd. N. of Tenn. and N. C. E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb	4.50	—
Tungstated, PTMA, bbls	lb	5.55	—

—Continued on page 40



NEW PETROCHEMICAL PLANT

now supplying BENZENE • TOLUENE • XYLENE

A final flip of a switch and our new petrochemical plant went on stream July 15th to meet the rising demand of the chemical industry for high purity benzene, toluene and xylene. The new plant is a combined UOP Platformer-Udex unit equipped with the most modern process control systems, insuring product quality and uniformity to meet the most stringent specifications.

Prompt deliveries of bulk shipments can be made by barge, tank car or truck to meet your processing schedules. Our plant has its own docking facilities, eliminating costly shipping delays.

Petrochemicals production is an important addition to Delhi-Taylor's extensive activities, which include oil drilling and production, natural gas production and petroleum refining.

For detailed information on product specifications, prices and delivery schedules contact our Chemical Division sales office at 415 Madison Avenue, New York 20, N. Y.

DELHI TAYLOR

CHEMICAL DIVISION

DELHI-TAYLOR OIL CORPORATION

415 Madison Avenue • New York 20, N. Y.

Oil, Paint and Drug Reporter

Founded October 18, 1871, by William O. Allison
Directed 1900-1942 by Harry J. Schnell
Incorporating Drug, Paint and Oil Trade, The New York Drug Bulletin, The Weekly Drug News, New York Druggists' Price Current, The Soap Makers Journal, Oil and Paint Review, and International Petroleum Reporter
Member of Audit Bureau of Circulations

Copyright 1957 by

SCHNELL PUBLISHING COMPANY, INC.
WILLIAM S. AUCHINCLOSS, *President*
30 Church Street, New York 7, N. Y., U. S. A.
Telephone REctor 2-9820 Cable Address: Reporter New York

Volume 172 **August 12, 1957** **No. 7**

New Alien Property Plan

Although it has been treated to a lot of artificial coloring, aromatizing, and other fixing up, including designations as "an act of grace," the proposal to pay the aggressors in World War II for the property vested by this country in the course of that struggle is still just as ill-advised and undesirable as ever. Even though President Eisenhower has been converted to the idea—against his military judgment—by pressure on behalf of the German chancellor, whose retention of office is alleged to depend upon such "bribing" of his people, it is still true, as the international law section of the American Bar Association declared at an earlier stage of the proposal, that "if we are to follow up the policy of building up an enemy property and of returning it to him tax free at the end of a war, a premium is placed on aggression."

Time brings many changes in philosophical concepts and in their applications. It is a long time since the program of reconstruction and the underlying campaigns of Sherman in the Civil War of this country; but it is still difficult to go along with the conclusion in the White House statement of July 31:—". . . in order to reflect the historic American policy of maintaining the sanctity of private property even in war time the administration intends as a matter of priority to submit to the congress early in the coming session a supplementary plan." The "sanctity" view of private property has been rejected by the courts of this country on various occasions; and the Paris agreement of 1955 covers the retaining of "external assets seized during the war in lieu of reparation or restitution." That agreement should be fully respected, because what this country got out of the war was its (the lion's) share in the "profits" of a partnership. It must be emphasized, as the ABA unit said, that "it is a well-known fact our allies were forced to liquidate many of their foreign holdings to finance their war effort; they were unable to place their overseas assets in a sanctuary; we do not believe that the United States should take unilateral action which would preserve the assets of the aggressors, when those of the allies were consumed in our common cause."

The United States has agreements with its allies; and neither it nor they should be required to pay for both sides of the war in repudiation of understandings reached in Paris in 1946 and in Bonn in 1950. It is fine to talk about the enemy "little fellow" who lost his assets in connection with the war; but, what of the property losses among the allies of this country? What about the loss of lives by "little fellows" there—and here?

The new proposal is to be presented to the congress at its next session. Meanwhile, those who look upon the human, rather than the financial, aspects of the consequence of war should work for the enactment by congress of the Smathers bill which would have alien—enemy, that is—property funds invested in a program of scholarships for children of US war veterans. Nothing really worth while is to be gained by paying former aggressive enemies to be friends.

For Lessons in Safety

On September 20, there will be conducted in Philadelphia a safety workshop for the chemical industry. It will be sponsored and staffed by the Manufacturing Chemists Association. Although intended, at least nominally, for the chemical industry, it is likely that the informative, instructive deliberations will be open to some extent to representatives of chemical-using industries whose safety problems are largely of similar types. Such an opportunity will be in keeping with MCA policies of helpfulness and is earnestly to be desired.

It certainly will be well for all those who handle chemicals as producers, distributors, or consumers in the Greater Delaware Area to attend the safety workshop. The sponsoring organization represents an industry which has an enviable record in safety under materials conditions that are not especially contributory in that direction. The chemical industry ranks eighth in the classification of industries by the National Safety Council—it got awards for its safety conditions in 1956. It has done much to teach industrial safety and has proved quite efficient as a teacher. Its pamphlets on individual chemical materials are most helpful at all stages of the handling of such materials. They are relied upon in full confidence by the consuming industries which have become acquainted with their actual, practical value. They should be a requirement of equipment under the safety regulations of every community where chemicals are industrially used, and also under the guidance rules of the organizations of chemical-using industries at all levels. Their messages are fully and clearly in keeping with the good old guide to safety in the iron furnaces, mills, foundaries, and shops of the 1890's:—"Know what you're doing—and watch yourself!"

The Oil-Import Decree

In the views of those who hold what are perhaps old-fashioned concepts of free enterprise, there is in the move by President Eisenhower to curtail imports of petroleum something that verges rather closely upon the dictatorial. They find it difficult to accept the finding of the cabinet group that advised the President in the matter that "increased volume of crude oil imports and the proposed imports for the latter half of 1957 threaten to impair the national security." They may be something like short-sighted in their view of national security, or even ignorant of what that is. But, they can see no emergency that justifies the President's threat to impose control if it is not voluntarily applied. They are somewhat dubious as to where a constitutional lawyer would find authorization for that threatening, even though the President told his July 31 news conference that "the whole present approach to this business of curtailing our oil imports arises out of one thing—consideration of the national security."

There was, of course, a particular significance in the President's telling the same news conference that the setting up of quotas on oil imports was "necessary to insure a healthy oil industry in the United States in event of emergency" and was an effort to help small local producers "who ought to profit." It is to be expected that they will profit—at the expense of consumers, who could have profited costwise if the President had been similarly regardful of the little fellows when the tax relief of small business was up for his approval.

The future of national security is steadily becoming less dependent upon petroleum because of the development of synthetic chemical fuels for purposes particularly related to defense. That is one reason why there already has been unprofitable accumulation of oil inventories, rather disappointing to the big companies, all of which had made enough money because of the Suez oil block (a six-month profit gain of something more than 15 percent) to do very much toward finding, tapping—and capping as a future resource—a goodly measure of that new oil supply which defense planners still consider a sine qua non in terms of national security.

There is a strong feeling in the big segments of the petroleum industry that voluntary reduction of imports will meet the President's quotas on time. They are not even guessing at what the quota-setting producing states will do toward offsetting the paring of imports. There is some puzzling over what may come out of the fact that imports into markets west of the Rockies are not to be pared as much as those for other regions in the way of effects upon the efforts of "independent" producers in Texas, whose organization is reported to have 5,000 members, to get facilities for piping their oil to the California markets. The big fellows are just looking at the possibilities of the import cutting in the direction of the projects having to do with the construction of more tankers with capacities of 100,000 tons or more. They know where most ships built in this country are going for operation—and the navy will need big tankers in anything that it is called upon to do for national security, even though there is difficulty in finding any connection of any of these aspects of petroleum problems, or puzzles, or whatever they may be.

It is being recognized by students of and participants in international trade relations that the cutting of oil imports is going to be matched by a reduction of exports of all types of USA goods to the oil-exporting countries. That, of course, has no bearing on national security. But, it does have something to do with—and to—the economic welfare of a considerable segment of the nation's business. While Venezuela will be able to do about as much business as usual with the Pacific coast states, the Middle Eastern producers are going to be pushed pretty well out of the USA markets—as buyers, as well as sellers. What is there in relation to national security in the opportunity which that will afford the Soviet Union to damn the west in that region?

Washington Talks It Over

Business Interests Will Keep Eagle Eye on Congress As It Roars Down Home Stretch—Anything Can Happen.

By Ralph L. Cherry
Chief, OPD Washington Bureau

With congress rushing down the home stretch toward adjournment, now that the civil rights hump has been surmounted, business interests and others concerned with pending legislative matters will be maintaining a close watch on developments. This is the time when anything can happen—and often does.

Legislation which has been dormant for weeks or months with every indication that it is dead for the session, has a way of suddenly springing to life again in the closing days of a session and being sped through one or the other houses before anyone realizes what has occurred. This is just what could happen to S 11 the controversial "good faith" pricing bill.

Activity has been suddenly stepped up around this bill in the past week or two, with all sorts of reports circulating that the bill has been the subject of some vote trading in connection with the civil rights issue, and there is a good chance that it may come out of the senate judiciary committee this week or next.

The report is that one of the southern members of the judiciary committee agreed to go along in favor of reporting S 11 to the senate in return for the votes of two other committee members for the jury trial amendment to the civil rights bill. His one vote, it is said, may be just the margin for getting a favorable report from the committee.

S 11 after being in the hands of a subcommittee for months, was sent ahead to the full committee several weeks ago without recommendations. This was unusual and almost everyone thought that would be the last heard of it this year. Such was not the case, however. A week ago the full committee referred it back to the subcommittee for further consideration of changes, but the subcommittee promptly reported it right back without change.

Last week the full committee began considering the measure for report to the senate, but failed to complete action. The bill is understood to be the "unfinished" business of the committee and therefore has priority over other pending bills. The committee meets again today to resume consideration and it is possible that some action may be taken.

Drug Industry Hits Back on TV Ads

Some of the radio and TV advertisers of pharmaceutical products who are being caught up in the Federal Trade Commission's drive against excessive and unsupported claims for their products, are beginning to fight back.

They think the commission's hit-or-miss policy of picking out the advertisers to issue complaints against is unfair to everyone generally. Before issuing a complaint against one concern, it is argued, the commission ought to look over the whole field of competitive products, and then hit them all at the same time.

There are no indications from the commission that it is ready to "buy this," however. A few well publicized complaints here and there have been warnings enough in the past to bring about a change in advertising practices.

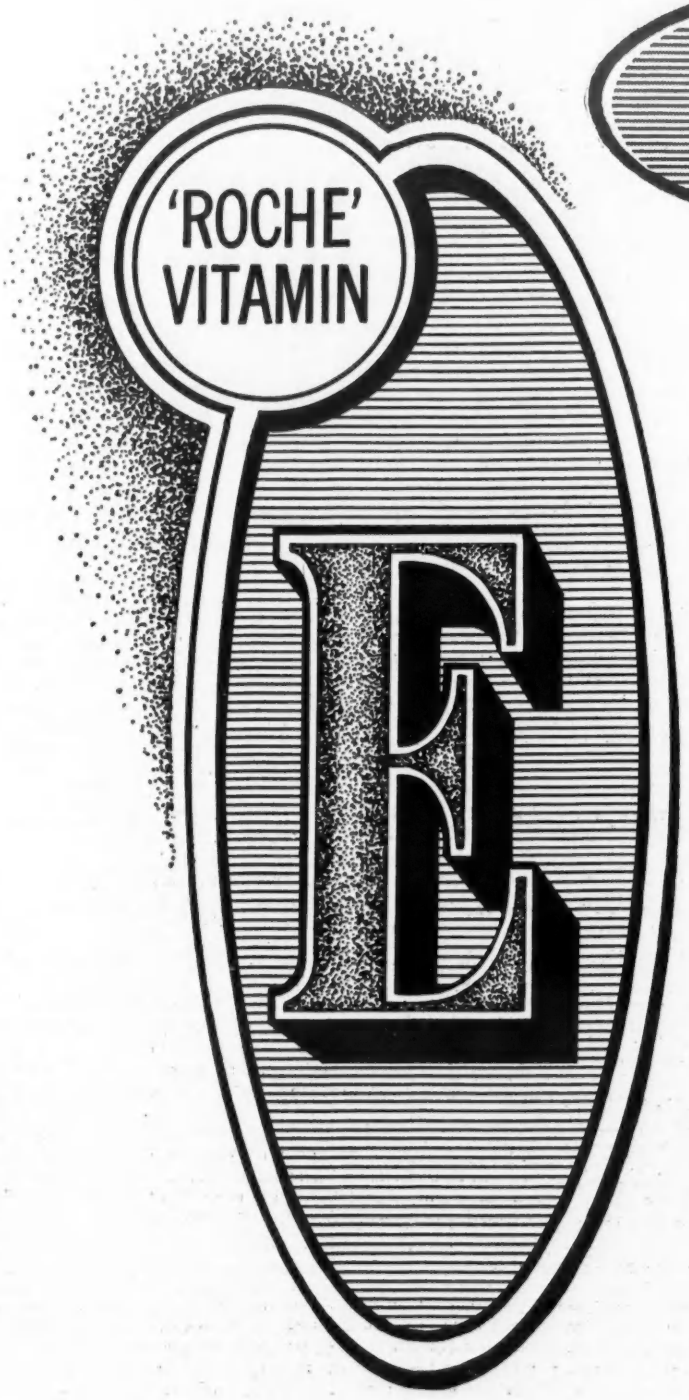
Paper, Board Demand in 1965

Commerce department looks for a steady rise in the demand for paper and paperboard in this country—probably as much as 40 percent by 1965 over what it was in 1955. The biggest increase percentage-wise in paper demand will be for newsprint where demand will step up over 67 percent in the ten-year span. The greatest increase in paperboard will be for "special food board." The department looks for a rise of as much as 146 percent in demand for this item.

The department's crystal-balling has been done at the request of the house interstate commerce committee, which has been very conscious of the problems of the paper industry since the war—what with its periods of extremely short supply and almost continously rising prices. The situation is such that more than one congressional committee has interested itself in the subject from various angles.

Whether this country will be able to meet 1965's demand for 43.8 million tons of paper and board, is something on which the department ventures no guess. It stops its prognosticating on the supply side of the picture with estimates of committed and proposed production capacity for 1959. It would seem, however, that industry will answer the call.

Its 1959 capacity is expected to be 40.7 million tons, up more than 8 million tons over what it was four years earlier in 1955, and only little more than 3 million tons short of what will be needed six years hence. These and other significant facts on the industry are available in house report No. 573, based largely on estimates of the department.



New

Dry, Stabile, Free-Flowing VITAMIN E ACETATE

- **FOR GREATER MANUFACTURING CONVENIENCE**
  Now for the first time—Dry Vitamin E Acetate Powder 25%—the first dry form to be made from pure *dl*-alpha-tocopheryl acetate, the International Standard.

- **DRY—REALLY DRY!**
  Dry Vitamin E Acetate Powder 25% 'Roche' can be incorporated with most other dry granulations and immediately compressed without sticking and binding in tablet dies and punches. It does not liquefy or turn gummy when mixed with other vitamin entities in most multivitamin tablet formulae. Problems with cracked tablets during shelf life are greatly, if not entirely, eliminated.

- **STABILITY—EXCELLENT**
  Practically no measurable loss of vitamin E potency occurs during normal handling. This new Roche development is stabile when stored in customary shipping containers and when processed into pharmaceutical tablets.

- **MIXES WELL—DRY OR IN LIQUIDS**
  New Dry Vitamin E Acetate Powder 25% 'Roche,' when mixed with dry multivitamin preparations, disperses readily in liquids such as fruit juices, milk and water. The vitamin E potency of these prepared solutions is well maintained.

- **GOOD COLOR AND PARTICLE SIZE**
  Having a pale ivory color, 'Roche' Dry Vitamin E Acetate Powder 25% is similar in particle size to a mixture of Roche No. 40 and No. 60 dry vitamin A acetate powders. It is free-flowing. It has pharmaceutical elegance.

- **BIOLOGICAL POTENCY**
  'Roche' Dry Vitamin E Acetate Powder 25% contains 250 International Units of vitamin E per gram. Pure *dl*-alpha-tocopheryl acetate, as used in this new Roche product, has been adopted as the International Standard for vitamin E and is also available from Roche.

- DRY Vitamin E Acetate 25%—each gram contains 250 International Units.
  LIQUID Vitamin E Acetate—each gram contains 1000 International Units.
  LIQUID Vitamin E Unesterified—each gram contains 1100 International Units.
  (This latter material is highly useful as an antioxidant as well as for vitamin E value.)

- **NEW LOW PRICES**
  The fluid forms of vitamin E 'Roche' are now at all-time low prices. New Dry Vitamin E Acetate Powder 25% is priced advantageously.

VITAMIN E COMES *RIGHT* FROM ROCHE

VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

Nutley 10, New Jersey, NUtley 2-5000 • New York City, OXford 5-1400

Pacific Coast distributor: **L. H. BUTCHER COMPANY, San Francisco • Los Angeles • Seattle • Portland • Salt Lake City**

In Canada: **Hoffmann-La Roche Ltd., 286 St. Paul Street, West; Montreal, Quebec**

COLUMBIA-SOUTHERN®

CHROME CHEMICALS

Sodium Chromate
Sodium Bichromate
Potassium Bichromate
Anhydrous Sodium Sulfate

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Boston • Charlotte • Chicago • Cincinnati Cleveland • Dallas • Houston Minneapolis • New Orleans New York • Philadelphia • Pittsburgh • St. Louis • San Francisco

SILICATE OF SODA
40° and 60°
EXPORT — DOMESTIC
TURPENTINE — LINSEED OIL — MINERAL SPIRITS
CHAS. L. READ & CO., Inc. 1 Newark Ave., Jersey City 2, N. J.
Telephone WOrth 4-1131-2-3 DElaware 2-2062-3

ROLL ME OVER

You've heard of the hillbilly whose wife had to roll him over to get the tobacco out of his hip pocket so she could light his pipe for him.

Just because we aren't table-thumping salesmen, some folks may think we are that sort of up-country boys, too.

Fact is, we save most of our hustle for the job of making extra-high quality Chromic Acid and getting it to our good customers on the double. So far that has worked out real well.

Next time you need Chromic, why not send us a modest order? You'll be surprised how much up-and-at-'em we'll put into taking care of you.

BFC PAINTS · PLASTICS · CHEMICALS

BETTER FINISHES & COATINGS, INC.

268 Doremus Avenue
Newark 5, N. J.

2014 East 15th St.
Los Angeles 21, Calif.

Heavy Chemicals

Price trends in the heavy chemicals market were mixed last week, and mostly lower. Rises in calcined alumina, aluminum hydrate and silver were more than counteracted by declines in copper, a number of copper salts, and mercury. The copper market has been weak for some time, and declines have been more or less expected. Mercury has been quiet, however, and feeling among some sellers has been that even if prices were lower, not a pound more would be sold.

Calcined alumina and aluminum hydrate were boosted as a result of increases in wages granted August 1 by the aluminum industry. Metal had gone up earlier. Other aluminum chemicals may go up soon, but when or how much are still questions to be decided by the industry.

Silver bullion increased last week, owing to a stronger demand from makers of silverware, who went back to work following summer vacation shutdowns.

Sulfuric and phosphoric acid demand suffered for lack of fertilizer interest. The rayon industry, still slumping, did not help the sulfuric market, although steel output has been fairly well maintained, and mills continued to come in for good quantities.

Chlorine inquiry held up well, and improvement has been noted for caustic soda and soda ash. However, sales of the latter two so far this month have not been up to expectations.

The American Paper and Pulp Association reported production for the week ended August 3 at 89.9 percent of theoretical capacity, as compared with the revised figure of 87.6 percent for the previous week, and 97.3 percent for the corresponding week of last year.

Price Trends

Advanced

Alumina, calcined, 2 10c. per lb.
Aluminum hydrate, 3/20c. per lb.
Silver, ¼c. per lb.

Reduced

Copper carbonate, 4/10c. per lb.
Copper chloride, cupric, anhyd., ¼c. per lb.
Cryst, dihydrate, ¼c. per lb.
Cryst., dried, ¼c. per lb.
Copper metal, ¾c. per lb.
Copper sulfate, CP, 25c. per cwt.
Cryst., 99%, 25c. per cwt.
Monohydrated, 20c. per cwt.
Tribasic, 40c. per cwt.
Mercury, $3 per flk.
Tin, ¾c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
103.96	104.03	104.19	101.96

For Current Prices See Page 9

Acids

Hydrochloric — Business continued to improve, but sellers were not too well satisfied. They felt that consumption should go up a little faster than it has.

The steel industry continued to perk along at about an 80 percent clip last week, and this was of considerable help to sales. Other end uses were seasonally active, with a real surge in business expected for late this month and early September.

Hydrofluoric — Demand for propellents and refrigerants was still strong. Consequently, a good volume of acid was moving to the makers of fluorinated hydrocarbons.

The stainless steel industry maintained production at an undiminished pace, and as a result, large volumes of HF continued to move in that direction.

Phosphoric — The market was quiet last week, and fertilizer demand continued practically nil. Food grade demand was fairly quiet, in accord with the season.

Sulfuric — Lack of interest from the rayon and fertilizer industries cut into the sales pattern. Steel and petroleum refinery demands were maintained in good volume.

Steel production last week was estimated at 2,092,000 tons, or 81.7 percent of capacity by the American Iron and Steel Institute. This figure is slightly higher than actual output for the previous week of 2,033,000 tons, or 79.4 percent of capacity.

Actual output for the corresponding week of 1956 was 1,415,000 tons, or 57.5 percent of capacity, as the industry was then recovering from a steel strike.

Bases and Salts

Alumina, Calcined—Prices were boosted a little sooner than had been expected, following the package increase granted labor in the aluminum industry.

Calcined alumina was lifted $4 per ton across the board, or 0.2c per pound. It was newly quoted at 4¾c per pound, bags, carlots f.o.b. works; and 5½c to 7¾c per pound, less carlots, same basis, as to quantity.

Aluminum Hydrate — This material was also raised, following increased costs in the aluminum industry. Heavy hydrate in bags, carlots, f.o.b. works, was quoted at 3.35c per pound; 20,000-40,000-pound lots, 3.6c; 2,000-20,000-pound lots, 4.6c; and bulk, carlots, 3.1c per pound. The increase amounted to $3 per ton across the board, or 0.15c per pound.

Calcium Chloride—Large volume sales continued unabated in the east, as that area suffered its second worst drought in sixty-eight years. Sales to maintenance departments for dust control on secondary roads were heavy.

Other areas of the country, which have experienced heavy rain during past weeks, appeared to present a stronger demand as dry weather began to prevail.

Caustic Soda — The market appeared to be in better shape than previously. Movement to a variety of users picked up following midsummer vacation shutdowns. It was conceded that business was still fairly spotty. A more substantial pickup is anticipated for late summer and early fall.

Chlorine—Liquid chlorine demand from makers of pesticides remained fairly active, although it was admitted that pesticide interest in the northeast has been held back due to the prolonged drought.

Movement of chlorine to other consumers was in good volume, and showed steady improvement. The paper industry was once again a strong factor in consumption.

Copper Carbonate—With lower metal, carbonate was decreased by 40c. per hundred pounds. Fifty-five percent carbonate was newly quoted at $32.35 per cwt., bags, carlots, f.o.b. works and $33.85 per cwt., less carlots, same basis.

Copper Chloride—Crystal cupric dihydrate was reduced 25c. per hundred pounds, and quoted last week at $28.25 per cwt., drums, carlots, works, and $28.75 per cwt., less carlots, same basis.

Cupric anhydrous was priced lower, at 42c. per pound to 42½c. per pound, drums, works, and cupric dried crystals, 36½c. to 37c., same basis, as to quantity.

Copper Sulfate — With the dip in metal, prices for copper sulfate were correspondingly reduced. CP was priced at 1.85c per pound; Crystal was lowered to $11.95 per hundred pounds, bags, carlots, works, and $12.45 to $14.95 per cwt., less carlots, same basis.

Monohydrated sulfate was priced at $21.50 per cwt., drums, carlots, works, and $22.25 per cwt., less carlots, same basis.

Tribasic sulfate was reduced to $26.20 per cwt., bags, carlots, f.o.b. works, freight equalized, and $27.20 to $30.20 per cwt., less carlots, same basis.

In lowering prices, producers did not expect to gain much by the move in the agricultural field. It was pointed out that demand has been considerably dulled by the severe drought which has plagued most of the northeast, resulting in a marked decline in potato bugs and fungus.

Lime—There has been little change in operations of lime plants during the past month. Most plants who produce a high quality chemical lime are operating from 10 to 15 percent below capacity.

However, some of the plants, who depend primarily on steel as their main outlet for lime, are off approximately 20 to 25 percent.

Some further cutbacks are expected during August, due to vacation shutdowns, but the industry in general is optimistic, and feels that most plants will be operating at or near capacity during the fourth quarter.

Nickel Salts—A producer said last week that its nickel salts have been off allocation for the past two months, owing to increasing availability. Anodes current-

Heavy Chemicals

ly are said to be the only nickel product still on customer allocation.

Soda Ash — Business hasn't been too bad during the midsummer slump, according to those producers who sell to the glass bottle industry. Sellers of dense ash to the flat glass industry were a little more pessimistic, however.

Light ash demand has been moderately well sustained, as the aluminum and paper industries have shown some recovery. Light ash inquiry for manufacture of various phosphates has been spotty.

Sodium Bicarbonate—Business has been steady and active during the past few months, and a good quantity has continued to go into prepared flours and baking mixes used in the home. Prices were unchanged.

Sodium Chlorite—Textiles have been considerably off, and this factor, combined with German imports which have been offered below American producers prices, has dampened the market. Business is expected to continue in the doldrums during August, but a pickup is anticipated for the balance of the year.

Sulfur—The following figures represent production, shipments and stock of sulfur of a purity of 97 percent or greater during specified periods in the United States, in tons:

	May	*April*
Native production....	429,227	461,589
Shipments	448,030	471,748
Sales*	385,480	514,958
Stocks†	4,092,772	4,049,025
Recovered production.	42,400	37,650
Shipments	37,305	39,920
Sales*	36,498	39,371
Stocks†	127,908	122,006

*Calculated from production and change in stocks during the period.

†Producers' stocks at mines or plants in transit, and in warehouse at end of period.

Nonferrous Metals

Aluminum — Higher price of 26c. per pound for pig and 28.1c. per pound for ingot was generally in effect last week. The across the board increase of 1c. per pound did not fully reflect higher salaries of workers in the industry.

It was pointed out that due to present keen competition among producers, as well as mountaing stocks, the price rise had been held down.

Chromium—Domestic production (shipments) of chromite in April increased 11 percent compared with March, according to the Bureau of Mines.

In the production of 49,279 short tons of chromium ferroalloys and metal that contained 30,081 tons chromium, the metallurgical industry consumed 115,068 short tons of chromite that averaged 47.09 percent Cr_2O_3.

In addition, about 2,000 tons of chromite was used by the metallurgical industry for direct addition to steel. Of the 115,068 tons, 93,126 tons was metallurgical grade that averaged 48.61 percent Cr_2O_3, 12,992 tons (44.20 percent Cr_2O_3) chemical grade, and 8,950 tons (35.48 percent Cr_2O_3) refractory grade.

The chemical industry used 13,261 short tons of chromite that averaged 44.74 percent Cr_2O_3 in the production of 9,862 short tons of chromium chemicals, sodium bichromate equivalent. The refractory industry consumed 34,858 short tons of chromite averaging 34.62 percent Cr_2O_3 in producing chromium refractory products.

United States imports of chromite during April were 23 percent less than in March. Imports of metallurgical grade ore and concentrate decreased most (25 percent), followed by refractory grade (21 percent), and chemical grade (14 percent).

Copper — This market drooped again last week, and primary producers in this country had to lower prices by ¾c. per pound. Metal was newly quoted at 28½c. per pound, delivered US destinations, by primary producers.

This was the lowest quotation since price decontrol influenced the market in 1953. Custom smelters were about ¼c. per pound lower than the newly established primary producers' price.

Mercury—Market remained very quiet, but trade reports indicated that lots of twenty-five flacks or more were being offered at $3 per flask lower than previously. Metal was quoted at $252 to $257 per flask, spot.

Silver—Market continued to firm, as silverware makers came back from vacations and influenced demand. Price rose fractionally, to 91⅛c. per troy ounce, spot.

Tin — Metal fluctuated narrowly last week, and was quoted at 94½c. per pound, spot, on Friday.

Cyanamid Magazine Issues Fiftieth Anniversary Number

American Cyanamid Company, New York, celebrates its fiftieth anniversary in a special issue of the "Cyanamid Magazine." The magazine contains a variety of articles and information about the company's activities.

The cover of the anniversary issue depicts results of two generations of research from which have come five symbols of Cyanamid's growth—"Creslan" fibers, plastics, pharmaceuticals, dyes, and other chemical derivatives.

Antibiotic Rules Amended

Food and Drug Administration has exempted bacitracin (—and zinc bacitracin—) tyrothricin and neomycin troches from the prescription-dispensing requirements of law. These preparation may be sold over the counter beginning next November 8 under FDA's order. The action was taken pursuant to a proposed amendment to its antibiotic regulations published last June by the agency for comment by interested parties.

Producers of SULPHUR

Uniformly high purity of 99½% or better

TEXAS GULF SULPHUR CO. INC.

75 East 45th Street
New York 17, N. Y.

811 Rusk Avenue
Houston 2, Texas

Sulphur Producing Units: Newgulf, Texas • Moss Bluff, Texas • Spindletop, Texas • Worland, Wyoming

TC TENNESSEE CORPORATION

COPPER

COPPER SULFATE
Industrial Crystals and all common grades.

MONOHYDRATED COPPER SULFATE
35% Copper as metallic packaged in steel drums at no extra cost.

COPPER CARBONATE
55% Copper as metallic. Light and dense grades.

CUPRIC CHLORIDE
37% Copper as metallic. Available in polethylene-lined drums or bags.

CUPRIC OXIDE
Minimum 76% Copper as metallic. Technical grade . . . NOT A BY-PRODUCT.

IRON

FERRIC IRON SULFATE
Partially hydrated, free flowing granular form. Available in bags or bulk.

SULFUR

SULFURIC ACID

LIQUID SULFUR DIOXIDE
Highest commercial quality, available in tank cars, tank wagons, ton cylinders and 150-lb. cylinders.

CHLOROSULFONIC ACID
Iron less than 1.0 ppm as loaded. Water white. Delivered in glass-lined tank wagons, also in stainless steel drums.

SODIUM HYDROSULFITE
T-C HYDRO is a dry, white, free flowing, crystalline powder of uniform particle size and structure. It is dust free, assuring highest stability and uniformity.

PARA TOULENE SULFONIC ACID, ANHYDROUS
Other organic Sulfonic Acids.

ZINC

MONOHYDRATED ZINC SULFATE
36% Zinc as metallic. White, free flowing powder.

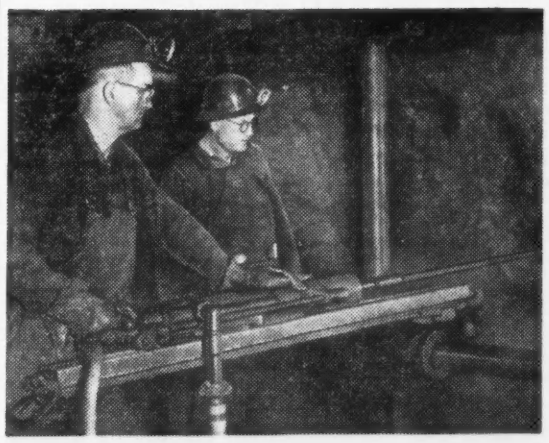
ZINC OXIDE
Secondary Zinc Oxide.

MANGANESE

MANGANESE SULFATE
65% Mn SO_4. Designed specifically for inclusion in mixed fertilizer.

MONOHYDRATED MANGANESE SULFATE
93% Mn SO_4, H_2O. Highest purity, technical grade . . . NOT A BY-PRODUCT.

MANGANOUS OXIDE
Minimum 48% Manganese as metallic. Feeds, fertilizers, spray or dust grades.



TC TENNESSEE CORPORATION

INDUSTRIAL CHEMICALS

We mine Copper, Sulfur, Iron and Zinc and are basic producers of their chemical derivatives. Our technical know-how and basic position in these minerals is your assurance of exacting quality control, strict uniform consistency and a plentiful supply.

Samples, specifications and detailed information upon request.

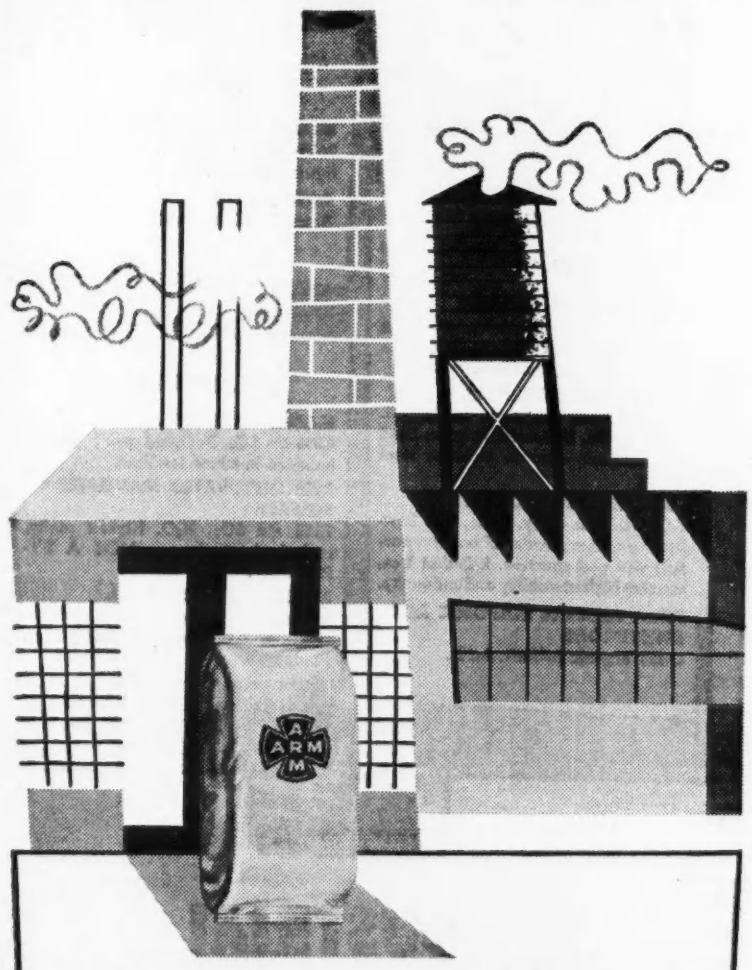
TENNESSEE TC CORPORATION

617-29 Grant Building, Atlanta, Georgia

SODIUM FERROCYANIDE
(Yellow Prussiate of Soda)
HENRY BOWER CHEMICAL MFG. CO.
30th AND GRAYS FERRY RD. PHILADELPHIA 46, PENNA.

SODIUM SILICOFLUORIDE BLOCKSON
BLOCKSON CHEMICAL COMPANY • Joliet, Ill. • *Division of Olin Mathieson Chemical Corporation*

N.F. TARTARIC ACID
CREAM OF TARTAR
E. M. SERGEANT PULP AND CHEMICAL CO., INC.
7 DEY STREET **Established 1867** **NEW YORK 7, N. Y.**



RIGHT AT YOUR FRONT DOOR and RIGHT IN YOUR PLANT

From the largest producer with the most **complete line** of phosphates and photo-pure chemicals **in the West.**

ARMOFOS (tripoly) • TRISODIUM PHOSPHATE
DISODIUM PHOSPHATE • DRI-TRI (anhyd. tsp)
TETRASODIUM PYROPHOSPHATE • MONOSODIUM PHOSPHATE
PHOSPHORIC ACID • SODIUM ACID PYROPHOSPHATE
SULFITE-HYPO-CARBONATE • ANHYDROUS HYPO
POTASSIUM PYROPHOSPHATES

QUESTEX (ETHYLENE DIAMINE TETRA ACETIC ACID AND DERIVATIVES)

Write for descriptive folder.

Maas

A. R. MAAS CHEMICAL CO.
Division of Victor Chemical Works
4570 Ardine Street • South Gate, Calif.

Current Market Quotations

—Continued from page 33

Valerian root, Belgian, bgs..... lb. .35 - —
Indian, bgs ..... lb. .29 - —
di-Valine, dms., works ..... lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton.95.00 Nom.
Victoria blue toner, bbls., prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.

Vinyl acetate monomer, Zone 1, 55-gal. dms., c.l., dlvd. lb. .20 - —
55-gal. dms., l.c.l., dlvd .... lb. .21 - —
tanks, dlvd ..... lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms., c.l., dlvd. lb. .21 - —
55-gal. dms., l.c.l., dlvd..... lb. .24 - —
tanks, dlvd ..... lb. .18½- —
tanktrucks less than 4,000 gals., dlvd lb. .19 - —
Zone 1 is all continental U.S. except Zone 2. Zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .35 - —
Vinyl chloride monomer, tanks, works lb. .11 - .12
Vinyl ether, tech., dms., c.l., works. lb. .26 - —
dms., l.c.l., works ..... lb. .28 - —
tanks, works ..... lb. .23 - —
USP, anesthesia, bots., 50cc. hospitals bot. 1.12 - —
USP, anesthesia, bots., 75cc. hospitals bot. 1.56 - —
Vinyl ethyl ether, tech., dms., works lb. .30 - —
Vinyl isobutyl ether, tech., dms., l.c.l., works lb. .33 - —
Vinyl methyl ether, cyls., works lb. .30 - —
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.
Vinyl propionate, monomer dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis ..... lb. .50 - —
tanks, same basis ..... lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.36 - —
1 to 9 dms. works... ..... lb. 1.50 - —
tanks, works ..... lb. 1.33 - —
Vinyltoluene, dms., c.l., frt. alld. lb. .18½- —
dms., l.c.l., frt. alld..... lb. .19½- —
tanks, frt. alld ..... lb. .16 - —
Virginia type red, bbls., works lb. 1.40 - —
Viosteral in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo.67.50 - —
dry, 325,000 units per gram, same basis kilo.43.88 - —
dry, 250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin A, palmitate, liq. 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
Liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin B, (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., 1-gram or 5-gram vials gram.245.00 - —
Oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram, less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots .. gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root, bark, bls..... lb. 2.25 - —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd. lb. 1.93 - —
dms., 23-49-lb. lots, New York or Chicago lb. 2.03 - —
cns., 5-24-lb. lots, New York or Chicago. lb. 2.15 - —
Watchung-type reds, bbls .. .. lb. 1.95 - —
Wattle bark, fair average, African, bls., ex dock. ton.80.00 - —
Merchantable, bls., ex dock .. ton.75.00 - —
Wattle extract, liq., 35% tannin, bbls. lb. .08¼- .08½
Solid, East Africa, 60% tannin, bgs., ex dock, duty extra lb. .0827½- —
Solid, South Africa, 60% tannin, bgs., ex dock, duty extra lb. .0940- —

Waxes

Wax quotations, formerly grouped under one heading, are now listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms .. gal.11.25 - —
Wheat starch (see Starch, wheat).
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls .. lb. .18 - .19
White precipitate, USP, powd., dms., lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .20 - —
Thin, rossed, bls. ..... lb. .21 - —
Wintergreen oil, USP, nat., northern, cns .. lb. 6.35 -10.30
USP, nat., southern, cns lb. 4.50 7.50
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. ..... lb. .16 - .17
Witch hazel leaves, bls. ..... lb. .27 - —
Wollastonite, fine, bgs. c.l., works. ton.39.50 - —
bgs., l.c.l., ex whse ..... ton.56.00 - —
Medium, bgs. c.l., works ..... ton.27.00 - —
bgs., l.c.l., ex whse ..... ton.44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs ..... lb. 4.25 4.50
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns. ..... lb. 5.50 - —

X

Xylene, coaltar indust., tanks, works—
Bethlehem, Pa. ..... gal. .34 - —
Birmingham dist. ..... gal. .32 - —
Chicago dist ..... gal. .35 - —
Cleveland dist. ..... gal. .34½- —
Geneva, Utah ..... gal. .29 - —
Johnstown, Pa. ..... gal. .33 - —
Lackawanna, N. Y. ..... gal. .35 - —
Lone Star, Tex ..... gal. .33 - —
Lorain, Ohio ..... gal. .33 - —
Middletown, Ohio ..... gal. .34 - —
Minnequa, Colo. ..... gal. .34 - —
Philadelphia dist. ..... gal. .34 - —
Pittsburgh dist. ..... gal. .32 - —
Sparrows Point, Md ... gal. .34 - —
Terre Haute, Ind. ..... gal. .34 - —
Youngstown, Ohio ..... gal. .32½- —
Xylene, petroleum indust., tanks, works:—
Bayonne, N. J ..... gal. .34 - —
Baytown, Tex ..... gal. .33 - —
Chicago, Ill ..... gal. .35 - —
Houston, Tex ..... gal. .33 - —
Philadelphia Pa ..... gal. .34 - —
Providence R. I ..... gal. .34 - —
Wood River, Ill. ..... gal. .34 - —

—Continued on page 70

Non-caking
DUPONT SODIUM NITRITE

PELLETED sodium nitrite flows freely even after months of storage in high humidity.

Caking is eliminated by this new Du Pont development—without reducing purity by the addition of anti-caking agents. Handling is easier and less storage space is required because pellets have 15% higher density than the granular form.

Du Pont Sodium Nitrite is also available in regular granular form for applications in which a finely-divided, high-purity product is preferred.

DISTRIBUTION POINTS are conveniently situated to insure prompt delivery and low freight costs wherever you may be located.

For more information, contact our branch office nearest you (Boston, Chicago, Cleveland, Dallas, Los Angeles, New York and Charlotte, N. C.) or write: E. I. du Pont de Nemours & Co. (Inc.), Explosives Dept., Wilmington 98, Del.

DU PONT
Better Things for Better Living . . . through Chemistry

USE THESE RAW MATERIALS?

Silica
Talc
Diatomaceous Earth
Potassium Nitrate
Zircon Sand
Zircon Flour

Berkshire Chemicals
INC.
420 LEXINGTON AVE., NEW YORK 17, N. Y.
BOSTON • CHICAGO • CLEVELAND
PHILADELPHIA • SAN FRANCISCO

Keep the gremlins out of your magnesium compounds

Specify Merck for magnesium compounds and be sure that there are no gremlins—or any other deterrents—to interfere with prompt delivery or quality.

The Marine Magnesium Division serves the rubber, plastics, steel, paint, ink, drug, cosmetic and chemical industries with the following "gremlin-free" magnesium products:

MAGLITE® D, M, L, and K
(Reactive Magnesium Oxides)

MARINCO® C
(Magnesium Carbonate, U.S.P. and Tech.)

HYDRO-MAGMA®
(Magnesium Hydroxide in Water)

MARINCO® O
(Magnesium Oxide, U.S.P. and Tech.)

MAGCAL®
(Inactive Magnesium Oxide)

MARINCATE™
(Magnesium Trisilicate, U.S.P. and Tech.)

MARINCO® H
(Magnesium Hydroxide, U.S.P. and Tech.)

For additional information and samples, write Department 6,
Merck & Co., Inc.,
Marine Magnesium Division,
Rahway, N. J.

DISTRIBUTORS:

THE C. P. HALL CO.

G. S. ROBBINS & CO., INC.

WHITTAKER, CLARK & DANIELS, INC.

MERCK

® Merck & Co., Inc.

Jobs & People

Barrett Division, Allied Chemical & Dye Corporation, New York—**James L. Hogeboom** has been appointed superintendent of its molding compound plant at Toledo, Ohio, by Barrett's plastic and resins manufacturing department. **Robert Q. Hunter** has been named superintendent of the coating resins plant. **Willard W. White, jr.,** has been made assistant plant superintendent of the coating resins installation. **George A. Johnston** has become superintendent of the Greensboro, N. C., plant.

Columbia-Southern Chemical Corporation, Pittsburgh, Pa.—**C. T. Robertson** has been appointed district manager for Columbia-Southern's Chicago sales office. Formerly assistant sales manager in New York, Mr. Robertson succeeds **I. G. Stewart** who will continue in an advisory capacity until his retirement in December.

Dow Chemical Company, Midland, Mich.—**Deane R. Ebey,** assistant sales manager of Dow's plastics department since 1951, has been appointed to the newly-created staff position of manager of personnel administration.

General Electric Company, Waterford, N. Y.—**Reuben Gutoff** has been made manager of resin and fluids operations in the manufacturing section of GE's silicone products department.

Michigan Chemical Corporation, St. Louis, Mich.—**Lynn H. Hahn** has been added to Michigan Chemical's research staff.

Oronite Chemical Company, San Francisco—**W. K. Venatta** has been made manager of Oronite's Oak Point, La., plant succeeding **T. I. Clausen** who has been transferred to California Research Corporation.

Pitts. Coke Buys

—Continued from page 5

thick asphaltic based mastics. They are designed to prevent atmospheric and industrial corrosion above ground, and in applications where moisture and vapor barriers are required on insulation.

Integration of Insul-Mastic products with its Pitt Chem tar based protective coatings will enable Pittsburgh Coke to offer a complete line of bituminous protective coatings to industry.

Among the best known Insul-Mastic products are materials it developed for the famous "cocoons" used in mothballing planes and ships at close of World War II. Recent product developments include a fire-retardant coating which insulates against a flame up to 2,000° F., and a line of industrial color coatings designed for appearance as well as utility.

Pittsburgh Coke recently broadened its coatings line with the development of "Tarset," a coaltar-epoxy resin coating designed to protect highly corrosive installations found in the petroleum, marine, and chemical industries. The company also developed special equipment for coating the interior of oil, gas, and water lines with the "Tarset."

Navy May Yet

—Continued from page 3

tivities that compete with industry if they involve the jobs of ten more civilian employees.

Attempts to have the controversial provision, section 411, eliminated from the bill when it came up on the house floor were successfully fought off by a group under the leadership of Reps. Porter Hardy, jr., of Virigina and John F. Baldwin of California in whose districts are located the two big navy paint factories (OPD, 7/15/57). As a result, the navy pulled back its plans to close down the plants.

It is possible that an effort will be made on the senate floor to have section 411 restored to the bill, although this is not a certainty. The strategy of the proponents may be to let the bill go through without the section so that when the measure is sent to conference the senate amendment eliminating section 411 can be used as a basis for trades with the house on other provisions in dispute in the bill.

Hooker CHLORATES

OLDBURY® BRAND

We are pleased to present these new members of the Hooker "family":

Sodium Chlorate

100 lbs. and 350 lbs. net single-trip steel drums.
Tank cars, in bulk, 40,000 lbs. min.; 80,000 lbs. max.

Potassium Chlorate

CRYSTAL ..... 325 lbs. net single-trip steel drums.
POWDER ..... 224 lbs. net single-trip steel drums.

Potassium Perchlorate

100 lbs. net single-trip steel drums.

For technical data and shipping information, write today.

HOOKER ELECTROCHEMICAL COMPANY

HOOKER CHEMICALS PLASTICS

808-2 FORTY-SEVENTH STREET, NIAGARA FALLS, NEW YORK

OLDBURY 1896

INDUSTRIAL CHEMICALS

Phibro

for metals and plating

CADMIUM OXIDE • CADMIUM ANODES
SODIUM CYANIDE • CHROMIC ACID
ZINC CYANIDE • ZINC ANODES
DEGREASING TRICHLORETHYLENE
CARBON TETRACHLORIDE
POTASSIUM CYANIDE
COPPER CYANIDE
PERCHLORETHYLENE
NICKEL CARBONATE
NICKEL SULPHATE
NICKEL CHLORIDE
NICKEL ANODES
COBALT SULPHATE

PORTLAND, CONN.
PROVIDENCE 3, R. I.
PHILADELPHIA 6, PA.

CHICAGO 1, ILL.
BALTIMORE 1, MD.
BOSTON 10, MASS.

Philipp Brothers Chemicals, Inc.

COLISEUM TOWER BUILDING
10 COLUMBUS CIRCLE · NEW YORK 19, N. Y. JU 6-6020

Cable Address: PHIBROCHEM NEW YORK

Manufacturers of

Red and Black **COPPER OXIDE**

COPPER SCALE

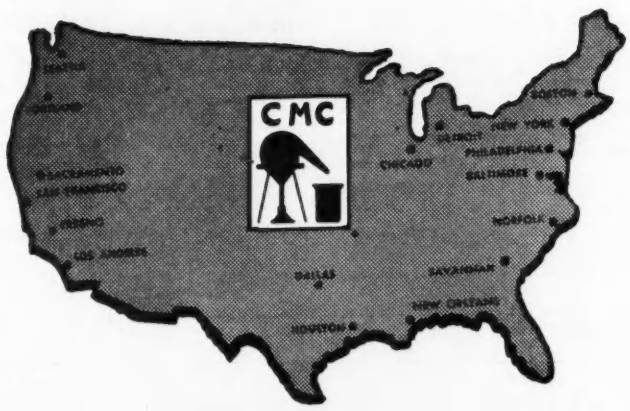
ROBERT A. COUPE, 260 Rhode Island Ave., PAWTUCKET, R. I.

Telephone PAwtucket 3-4944

O P D

Quickest way to keep current on Chemical Costs

Quality + Distribution = Service



IMPERIAL CHEMICAL INDUSTRIES LIMITED

Ammonium Chloride, Grey and White • Ammonium Bicarbonate USP • Ammonium Carbonate • Bleaching Powder Tropical 34%-36% Cl_2 • Calcium Formate • Chlorinated Paraffin 42% Cl_2 • Chlorinated Rubber • Copper Cyanide • Potassium Cyanide • Sodium Cyanide, all grades • Zinc Cyanide • Sodium Aluminate • Sodium Bicarbonate USP and Tech. • Sodium Carbonate Monohydrate • Sodium Perborate • Trichlorethylene, all grades • Urea, 46% Tech. • 3,3,5 Trimethyl Hexanol • 2:4 Dimethyl 6-Tertiary Butyl Phenol

PETER SPENCE & SONS LIMITED

Aluminum Sulphate, Iron Free • Ammonia Alum • Butyl Titanate • Potassium Alum • Titanium Potassium Oxylate • Cobalt Molybdenum Catalysts

DEEPWATER CHEMICAL CO., LIMITED

Iodine, Resublimed USP and Reagent * Potassium Iodide, USP and Reagent * Potassium Iodate, USP and Reagent * Special Potassium Iodide Mixtures * Cuprous Iodide, Tech.

LCL quantities available from Distributor Stocks in your area. This is only a partial listing of the items we offer. Write for complete product listings.

CHEMICAL MANUFACTURING CO., INC.

714 W Olympic Boulevard, Los Angeles 15, Calif., Richmond 9-4379

444 Madison Avenue, New York 22, N. Y., MUrray Hill 8-8700

114 Sansome Street, San Francisco 4, Calif., YUkon 6-3787

Obituaries

Joseph R. Esposito

Joseph R. Esposito, retired director and vice-president of Interchemical Corporation, New York, died August 5 in New York. He was seventy-two years old.

Mr. Esposito retired from his executive positions in 1950, but during the past seven years served as a consultant to Interchemical, specializing in the metal-decorating industry. He was honored last month for fifty years of service to the industry.

Kenneth T. King

Kenneth Theodore King, retired manager of the fine chemicals division of E. I. duPont de Nemours & Co., Wilmington, Del., died in Alden, Mich., August 8. He was sixty-five years old. Mr. King retired from duPont in 1949 after a thirty-year career with the company.

Dr. Heinrich Wieland

Dr. Heinrich Wieland, director of the chemical laboratory of the University of Munich, Germany, died August 5 in that city. He was ninety years old.

Dr. Wieland was awarded the Nobel Prize in 1927 for his work on cholic acid and his development of lobelin, a breathing stimulant. Working in close connection with Dr. Adolf Windaus, Dr. Wieland demonstrated that cholesterin was formed by fermentation in the liver.

Junius D. Edwards, former assistant director of research for Aluminum Company of America at New Kensington, Pa., died August 5 in Highland, N.C. He was sixty-seven years old. Mr. Edwards joined Alcoa in 1919.

Walter Gravill, retired executive and credit manager of Balfour, Guthrie & Co., Ltd., New York, died August 5 in that city. He was seventy-seven years old.

Hoyt Miller, chemist formerly with H. A. Metz & Co., New York, died August 6 in Kings Point, N.Y. He was seventy-four years old. Early in his career, Mr. Miller became interested in color photography, microphotography and high-speed photography. He obtained several patents for developments in color film and its dyes, having devised a process used for making training films for service men in World War II.

Earl Rowswell, district sales manager in the Detroit, Mich. Office of Spencer Kellogg & Sons, Inc., Buffalo, N.Y., died July 27 in Royal Oak, Mich. He was fifty-two years old.

C. Elmer Townsend, former manager of the insurance department of Sun Oil Company, Philadelphia, died August 4 in Somers Point, N.J. He was seventy-five years old.

Bids Wanted

Acetone, 263,550 lbs., inv. 6, Aug. 16, N. Y. Chem. Procurement Dist., N. Y., N. Y.

Calcium chloride, 9,122 100-lb. bgs. hydrated, tech. grade, 942 ,00-lb. metal dms. same, inv. 11, Aug. 16, Chemical Procurement Dist., 290 Broadway, N. Y. 7, N. Y.

Calcium hypochlorite, 960 cans, inv. NY-1GD-81-138, Aug. 20, Gen. Services Adm., Fed. Supply Service, Business Service Center, 250 Hudson St., N. Y. 13, N. Y.

Diethyl ether, 1,200,000 lbs., grade C, inv. 10, Aug. 28, Contracting Office, Naval Powder Factory, Indian Head, Md.

Naphthalene, 187,200 lbs., tech., type II, inv. 4, Aug. 15, N. Y. Chem. Procurement Dist., N. Y., N. Y.

Pesticides, 300 lbs. dieldrin, 50% water dispersible powd., 750 lbs. orthocide, 50% wettable, inv. FN-4Q-8078-A, Aug. 20; 5,000 lbs. dieldrin, 50% water dispersible powd., inv. FN-4Q-7443-B-A, Aug. 21, Gen. Services Adm. National Buying Div. Fed. Supply Service, 7th & D Sts., S.W., Washington 25, D. C.

Sodium hexametaphosphate, 500,000 lbs., inv. 9, Aug. 23, N. Y. Chem. Procurement Dist., N. Y., N. Y.

Sodium orthosilicate, 16,000 to 480,000 lbs., inv. 8, Aug. 21, N. Y. Chem. Procurement Dist., N. Y., N. Y.

Arcadian

YOUR HEADQUARTERS FOR NITROGEN

Ammonia Liquor • Anhydrous Ammonia • Urea Products
Ammonium Nitrate • Nitrogen Solutions • Nitrate of Soda
A-N-L® Fertilizer Compound • Sulphate of Ammonia
12-12-12 Granular Fertilizer

NITROGEN DIVISION Allied Chemical & Dye Corporation
40 Rector St., New York 6, N. Y.
Plants at Hopewell, Va. • Ironton, Ohio • Omaha 7, Neb.

NITROGEN DIVISION ALLIED CHEMICAL

Call Wyandotte for real satisfaction in

Liquid Caustic

1. Chemically uniform.
2. Technical help on storage, handling, safety, and economics of 50% and 74% liquid grades.
3. Special shipping methods to eliminate iron pickup in transit.
4. Prompt delivery.

Also many anhydrous grades from nearby plants and widespread distributor stores.

Wyandotte CHEMICALS

MICHIGAN ALKALI DIVISION • HEADQUARTERS FOR ALKALIES

WYANDOTTE CHEMICALS CORPORATION, WYANDOTTE, MICHIGAN • *Offices in Principal Cities*

WYANDOTTE CHEMICALS

Agricultural Chemicals

Seasonal factors damped trade in many fertilizer materials last week, but most segments of the market were fundamentally sound. Anticipated sales of next winter were substantial and, meantime, the export market was generating some lively business. With contract negotiations still under way, awards have already been made for sale of about 70,000 tons of ammonium sulfate and about 25,000 tons of ammonium nitrate to Greece for delivery not later than next January and February. First Korean tender of the new fertilizer year called for opening of bids September 5 on offers to sell more than $4 million worth of fertilizer materials. Total value of Korean tender sales in the current fertilizer year will be $37 million. That's $10 million less than the 1956-57 total. Originally sought for this year was $60 million worth.

A helpful factor with respect to the currently sound position of most fertilizers was the tardy arrival of spring.

Ammonium sulfate was strong, but the weight of stocks in Europe threatened the firm export market.

Ammonium nitrate was in balance, and, unless unforeseen reverses force consumers to curtail sharply their intended purchases, it should be healthy throughout the new fiscal year.

Phosphate rock and superphosphate were quiet in the interval between a fairly satisfactory season just closed and a promising one expected to get under way in earnest just after Labor Day and the harvesting of the corn crop.

Supplies of urea, long tight, were loosening up. This development was reflected in trade reports to effect that the supposed market price was shaded slightly in some sales made abroad.

Pesticides makers have deepened and widened their markets in many areas, but merciless competition, adverse weather conditions and shaky consumer credit combined to make this business no bed of roses. There was hope that export demand would provide some relief.

It was still too early to evaluate the probable consequences of the recent nicotine plant shutdown on supplies of the aphid-killing nicotine sulfate.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
110.73	110.73	110.70	107.15

For Current Prices See Page 9

Animal and Plant Foods

Ammonium Nitrate—Supply and demand were in even balance last week. Demand has been quite satisfactory all season, and supplies were just sufficient to ensure prompt delivery against immediate and short-term consumer requirements.

Nearly all producers were in a sold up position at the close of the past fertilizer year or finished with strictly limited inventories. Now they were building up stocks against anticipated sales of next winter and spring. If the expected volume of business materializes at that time, this will continue to be a very healthy market. No trouble was anticipated unless unforeseen reverses should force consumers to curtail severely their planned purchases.

A tonic effect was sale of about 25,000 tons of ammonium nitrate to Greece. Though contract negotiations were still under way last week, the contracts have already been awarded. Delivery was required not later than next January and February.

Ammonium Sulfate—The currently strong export market served to offset some diminution in domestic demand for ammonium sulfate. The combined effect was a firm market, particularly in light of depressing seasonal factors and the recent history of bad weather in many parts of the nation.

Awards were recently made for the sale of about 70,000 tons of sulfate to Greece. Negotiations were still under way as of last week, but ships were already loading the material for delivery, the deadlines on which were in next January and February.

One dark cloud hovered in the otherwise brilliant market atmosphere. It was topheavy and still-growing inventories in Europe. Should the deteriorating European market generate considerably sharpened competition in foreign markets, this phenomenon might well be reflected in the US, trade sources believe. So far, the European problem has not appreciably affected other parts of the world, but US producers weren't taking any bets on this one.

Animal Proteins—The market for fishmeal and fishscrap was in a stand-off position last week. Good catches were reported off both the Atlantic and Gulf coasts. But demand was quiet, and producers were offering only limited supplies at current prices.

Quotations at last reports were firming up. They dropped off around $7 per ton some two weeks ago, then recovered to former levels a few days later. As of the close of business last week, menhaden fishscrap was offered on the Atlantic and Gulf coasts at $125 per ton. Meal was priced $5 per ton higher.

The lull in trade was in no way attributable to inadequacy of supplies. On the contrary, this was the heart of the fishing season, and supplies were plentiful. It was just that demand was feeble and that producers were for the most part inclined to wait on the sidelines for more favorable market conditions. Business normally becomes brisk in the autumn, and they could hope for livelier interest on the part of consumers by that time.

Superphosphate—Producers have only recently finished contracting for the new fertilizer year.

The market as of last week was dull and featureless. Trade was in limited volume, and nobody expected any appreciable change before Labor Day. In October, after the corn is harvested, the planting of the fall wheat crop could bring this market back to life for a while.

Meantime, super was in plentiful supply. Producers reported that business had been fairly satisfactory through the past season, but there was enough excess material to handle substantial additional consumer requirements.

Urea—This material has for long been notably tight, but supplies have been loosening up just lately. This development was reflected in trade reports to effect that the supposed market price was slightly shaded in the case of some sales made abroad. Despite the moderate easing off in this market, traders still regarded it as fundamentally sound.

Pesticides

Demand for pesticides for export continued to buoy the market, but several adverse factors combined to provide producers and dealers with a headache. One of these was merciless competition. Another was drought, another floods. And there was the old story of farmers' credit ratings.

There was plenty of trouble to generate business in the domestic field. The Agricultural department's Cooperative Economic Insect Report called the Nebraska infestation of grasshoppers the worst since the 'thirties. The boll weevil was inflicting heavy damage in the Carolinas and Tennessee. The codling moth was taking a heavy toll in Virginia orchards. The salt-marsh caterpillar was on the march. And second-brood European corn borer moths were ubiquitous.

2, 4-D—Producers have broadened and deepened their markets for this material. In spite of this, the past season has been a poignant disappointment to most of them. Production ran well ahead of sales, and the industry was left choking on surplus inventories.

DDT—Ruinous competition, lowly regarded consumer credit and adverse weather conditions combined to give DDT producers a hard time. The silver lining was the hope that demand for material for export would put a little wind in the sails.

Nicotine Sulfate—It was too soon to evaluate the probable consequences of the recent nicotine plant shutdown on supplies of nicotine sulfate, popular for use in killing aphids.

P.C.A. SALT of the EARTH RED MURIATE

Producers of
Agricultural and Chemical Grade
MURIATE OF POTASH

POTASH COMPANY OF AMERICA
Carlsbad, New Mexico
General Sales Office...1625 Eye Street, N. W., Washington, D. C.
Midwestern Sales Office...First National Bank Bldg., Peoria, Ill.
Southern Sales Office...Candler Building, Atlanta, Ga.

PROPER CONDITIONERS PROVE PROFITABLE AND BUILD GOOD WILL
Prompt and future shipments — Your inquiries invited
Telephones Phila: WOodlawn 6-2300 LOmbard 3-2288
THE DICKERSON COMPANY
130 North Broadway Camden 2, N. J.

DUVAL
MURIATE OF POTASH
SULPHUR
DUVAL SULPHUR and POTASH CO.
Exclusive Distributors
ASHCRAFT-WILKINSON CO.
ATLANTA, GEORGIA
Cable Address: Ashcraft
District Offices
Norfolk, Va. • Charleston, S.C. • Tampa, Fla.
Jackson, Miss. • Columbus, Ohio • Montgomery, Ala.
Des Moines, Ia.

PERSONALLY YOURS...

IF THIS is the office copy of OPD, why not try the convenience of your own subscription? Yours to see promptly each week—as personal as your favorite daily paper.

Then you'll be sure to see all the news of chemicals and other process materials . . . each week more than 6,000 current price quotations, plus quantity lists of importations at major ports . . . ten market letters discussing current materials movements, arranged in easy-to-read departments . . . and news of people and events in the field.

Either this coupon or a letter will get you started — a good investment for the important months ahead.

( ) Send bill for one year (52 issues) $5* ( ) Check enclosed

PLEASE PRINT OR TYPE

Individual .....
Street address..... please check ( ) business ( ) home
City, Zone and State .....
Company connection .....
Firm's products and type of business .....
Your position or work .....

** This rate applies only in the United States. Other countries—Canada $7; Foreign $10, remittance with order, in U.S. funds.*

OIL, PAINT AND DRUG REPORTER
30 CHURCH STREET, NEW YORK 7, N. Y.

Only Procter & Gamble supplies GLYCERINE from 9 plants across America!

Producing a steadily increasing supply of natural GLYCERINE to fill your needs.

FOR INFORMATION WRITE:
Procter & Gamble, Cincinnati 1, Ohio
or 155 East 44th Street, N. Y. 17, N. Y.

LEVER BROTHERS COMPANY
Producers and Refiners of
NATURAL GLYCERINE
390 Park Avenue — New York 22, N. Y.

THE KEY TO HARCHEM SEBACIC HEAT AND LIGHT STABILITY

SEBACIC ACID is a PURE Chemical

Harchem Sebacic Acid is suitable for your most exacting developments and provides outstanding

HIGH TEMPERATURE STABILITY • BUILT-IN FLEXIBILITY
MAXIMUM LIGHT RESISTANCE

so essential to Alkyds, Polyesters, Polyamides, Plasticizers and Synthetic Lubricants.

H-13

HARCHEM DIVISION
WALLACE & TIERNAN INC
25 MAIN STREET, BELLEVILLE 9, N. J.
IN CANADA: W. C. Hardesty Co. of Canada, Ltd., Toronto.

Get it First . . . . . .
Get it All . . . . . .
Get it Straight . . . . . .
. . . . . in OPD

TRIETHANOLAMINE

Albany
Boston
New York
Newark
Philadelphia
Baltimore
Charlotte
Atlanta
Buffalo
Pittsburgh
Cleveland
Cincinnati
Detroit
Indianapolis
Chicago
St. Louis
Houston
Seattle
San Francisco
Los Angeles

Drum stocks of Triethanolamine are maintained in principal industrial areas. Larger quantities are shipped directly from our plants. Phone or write our nearest office for information and prices.

Carbide and Carbon Chemicals Company
A Division of
Union Carbide and Carbon Corporation
UCC
30 East 42nd Street, New York 17, N. Y.
In Canada: Union Carbide Canada Limited, Toronto

Aliphatic Organics

Vacation plant shutdowns have hit the solvents especially hard this year. Making allowances for this and other seasonal factors, ethanol has been moving briskly. Current prices permitted only a narrow price margin, producers said. The industry was watching closely to see what effect there would be on this market as a result of the July 12 purchase by an American fermentation producer of 160 million gallons of Cuban blackstrap molasses. They expected a showdown in the next six months.

Acetone was moving into an expanding market, and the tone here was excellent in spite of plant shutdowns and the July 1 price increase. Even after that increase, it was noted, acetone was still just about the cheapest solvent available for many applications.

Stocks of glycerine on hand at producers' plants rose slightly in May, though, Association of American Soap and Glycerine Producers observed, domestic consumption ran slightly ahead of domestic production during that month. Net gain in producers' stocks was again due to unfavorable balance of exports and imports. It was noted, however, that volume of imports during May represented a sharp decline from those of April.

The market for crude glycerine continued to soften. Latest quotations appeared to be about 1/10 cent per pound lower for saponification material and off ¼ cent per pound for soaplye.

Producers of refined glycerine reported that, seasonal factors taken into account, trade has been brisk. They noted that the rate of domestic consumption was holding up well.

Allyl chloride was in a strong position due to growing demand for epichlorohydrin for use in manufacture of epoxy resins and the alternative possibilities available to producers to divert the chloride to production of allyl alcohol or synthetic glycerine.

There were reports of heavy demand for glutamic acid. A major part of consumption was traceable to its use in solutions employed in the cleaning of metal preparatory to welding. Supplies of this material were generally adequate to meet consumers' immediate and short-term requirements.

Formaldehyde and paraformaldehyde moved in fairly good volume but were slow relative to production capacity and earlier forecasts.

Acetic Anhydride—In light of business conditions in general, dealers in acetic anhydride were well pleased with the demand for this material. On a delivered basis in the east, sales were quoted at 16½c. per pound in drums, carlots, and at 17½c. per pound in smaller drumlots, with material commonly packaged in aluminum returnable drums. On the same basis, material was sold in tanklots at 14c. per pound.

Acetone—Steady growth of this market was again noted by trade sources contacted last week. In spite of the fact that consumers were carrying heavy inventories accumulated prior to the July 1 price advance, and making allowances for extensive long vacation plant shutdowns, demand was holding up well. The versatility of this solvent and diversity of the market pattern were credited with bolstering the market. It was noted, further, that, even with the July 1 price increase, acetone remained just about the cheapest solvent available for many applications.

Allyl Alcohol—Demand for this material for intermediate use in production of a wide variety of resins and diverse esters employed in perfumes, flavorings and pharmaceuticals continued to hold up well, producers said, in spite of seasonally slack business in other quarters. Consumption of allyl alcohol as a denaturant was steady. Total volume of business was moderate. Supplies were adequate, producers' inventories normal. Prices of long standing were unchanged.

Allyl Chloride — Production of allyl chloride was keyed high in response to strong demand for synthetic glycerine, epichlorohydrin and allyl alcohol. This segment of the market appeared to be less sensitive than others—the solvents, for instance—to the prevalence of plant vacation shutdowns and the general buildup of consumer inventories prior to July 1. Flexibility in production and diversity of markets were combining to keep producers of allyl chloride in a comfortable inventory-supply position.

Price Trends

Advanced
None

Reduced
Glycerine, crude, dom., nat., saponification, 1/10c. per lb.
Nat., soaplye, ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
131.17	*131.16	131.24	131.10

For Current Prices See Page 9

* Revised

Epichlorohydrin—Growing demand for epoxy resins has been supporting a strong market in epichlorohydrin, producers reported. It has been estimated that something like 20 million pounds per year of the raw material building block was currently moving through this outlet.

The market was rigidly limited to intermediate use in production of epoxy resins, but producers—working from allyl chloride as the starting material for production of epichlorohydrin—were given considerable latitude in which to operate, since the chloride could readily be diverted to production of glycerine and allyl alcohol as market conditions should warrant. Meantime, superior corrosion resistance, flexibility and adhesive properties have steadily widened and deepened the market for epoxy resins.

Ethanol—Aside from the extensive and protracted vacation plant shutdowns—a factor that has been particularly bearish in solvents—ethanol's market position remained notably strong. Unlike many other solvents, ethanol was selling at the same prices now as those that were in effect in the second quarter. Producers said that they have been operating, therefore, on a very close profit margin.

The industry was watching closely to see what would come of the recent (July 12) purchase by an American fermentation producer of 160 million gallons of Cuban blackstrap molasses. This and other developments concomitant to the break in the Cuban blackstrap market could materialize in a heavy increment to ethyl alcohol production. Trade sources here expected a showdown to be played out in the next six months.

Glutamic Acid—Trade sources last week reported heavy demand for this material. A major part of consumption was traced to its use in solutions employed in the cleaning of metal preparatory to welding. Supplies were generally adequate to meet consumers' immediate and short-term requirements. Prices of long standing remained unchanged.

Glycerine—Stocks on hand at producers' plants rose slightly in May, though, through that month, domestic consumption ran slightly ahead of domestic production. The net gain in producers' stocks was again due to unfavorable balance of exports and imports, but imports declined sharply during May, as compared to those reported for the month previous.

On the basis of 100 percent contained glycerine, Association of American Soap and Glycerine Producers has reported the following:

For May of this year, production of 20,717,000 pounds plus import of 1,725,000 pounds plus producers' stocks as of the first of the month amounting to 71,174,000 pounds made a total of 93,616,000 pounds of glycerine available during that month. Some 785,000 pounds was exported, leaving 92,831,000 pounds available to the domestic market. Since consumers' stocks at the end of the month amounted to 71,560,000 pounds, apparent domestic consumption during the month was 21,171,000 pounds.

For the month previous, starting stocks at producers' plants aggregating 67,846,000 pounds were augmented by production of 20,679,000 pounds and import of 3,304,000 pounds, bringing the total available during the month to 91,829,000 pounds. Subtracting the 991,000 pounds exported during that month, some 90,838,000 pounds was available to the domestic market. Producers' stocks at the end of the period were 71,174,000 pounds, indicating ap-

Aliphatic Organics

parent domestic consumption of 19,664,000 pounds.

For May, 1956, production of 20,228,000 pounds and import of 693,000 pounds added to the 64,596,000 pounds on hand at producers' plants as of the first of that month brought the total available to 85,517,000 pounds. Exports during that month amounted to 1,256,000 pounds, leaving 84,261,000 pounds of glycerine available to the domestic market. Apparent domestic consumption of 19,241,000 pounds during that month is indicated by the fact that producers' stocks amounted to 65,020,000 pounds as of the end of the period.

Aggregate for the first five calendar months of this year, production of 102,716,000 pounds and import of 9,171,000 pounds, added to the 67,247,000 pounds of glycerine on hand at producers' plants at the beginning of the period, have made 179,134,000 pounds available. Of this, 3,427,000 pounds was exported. That left 175,707,000 pounds available to the domestic market. Since producers' stocks as of the end of the period amounted to 71,560,000 pounds, apparent domestic consumption of 104,147,000 pounds during the five-month period is indicated.

Total glycerine available in the first five calendar months in 1956 was 172,346,000 pounds, consisting of producers' stocks on hand as of the first of the period of 51,977,000 pounds plus production of 111,945,000 pounds and import of 8,424,000 pounds. After deducting the 4,171,000 pounds exported during the five months, it appears that 168,175,000 pounds was available to the domestic market. Producers' stocks on hand as of the end of the period amounted to 65,020,000 pounds, indicating that domestic consumption during the five months added up to 103,155,000 pounds.

Refined glycerine producers reported trade was brisk, seasonal factors taken into consideration. The rate of domestic consumption was holding up well.

The market for crude continued to soften. Limited trade in saponification material on the west coast was reported at 17½c. per pound, delivered basis, equivalent to about 16¾c. per pound on a works basis. Current quotations on domestic material appeared to be 17½c. per pound for saponification (down 1/10c. per pound from previous quotations) and 15¾c. per pound for soaplye (¼c. per pound below prices quoted in the week previous).

There have been no new commitments recently for crude from foreign sources. Those made earlier in the year, however, were heavy, and it was against these that substantial imported material was arriving here at this time. Heavy shipments were expected to continue to arrive here for the next 90 to 120 days, all these being against prior commitments. Current prices for imported crude, both nominal, were 14½c per pound for soaplye and 15.95c per pound for saponification grade.

Methanol—Synthetic output in May of this year amounted to 108,426,616 pounds, the Tariff Commission reported, bringing the total synthetic output through the first five calendar months of this year to 599,752,159 pounds (including the partly estimated figure reported for January).

The commission's production figure for natural methanol in April (the data on natural material are reported one month later than those for synthetic) was 1,281,520 pounds and brought the total for the first four calendar months to 4,827,280 pounds. Total natural plus synthetic output in April was 111,816,322 pounds, building the total for the first four calendar months (partly estimated) to 496,152,823 pounds.

Census Bureau reported 201,000 gallons of natural material (on a 100 percent basis) was produced during May of this year, as compared to 199,000 gallons turned out in May, 1956. The bureau's totals for the first five calendar months were 928,000 gallons this year, as against 976,000 gallons produced in the like period in 1956.

Total output of synthetic plus natural methanol was 508,940,340 pounds over the first four months of 1956, including 5,159,280 pounds of natural material, of which latter 1,354,560 pounds was produced in April. Adding 1,321,360 pounds of natural material and 118,282,985 pounds of synthetic methanol produced in May of that year, the total synthetic plus natural output for the first five calendar months was 628,544,685 pounds, including 6,480,640 pounds of natural methanol and 622,064,045 pounds of the synthetic.

Tar Flowed Slower

—Continued from page 4

that produced for blending in motor fuel) amounted to 136 million gallons. Sales of xylene in 1956 were 85 million gallons, valued at $22 million. Production of crude naphthalene in 1956 was 491 million pounds, compared with 477 million pounds in 1955. Sales of naphthalene in 1956 amounted to 289 million pounds, valued at $19 million.

Production of creosote oil in 1956 was 132 million gallons, compared with 130 million gallons in 1955. The output of road tar amounted to 92 million gallons—about the same as in 1955.

RANEY CATALYST CO.

Originators and Dependable Suppliers of

RANEY CATALYSTS

Raney NICKEL ®

1322 Hamilton National Bank Bldg.
Chattanooga 2, Tenn.

Since 1925 — Phone: Amherst 6-8616, Taylor 1-7823 — Cable Address: RANI

ETHYLENE GLYCOL ANTI FREEZE TYPE

METHANOL 99.85% PURE VIRGIN MATERIAL

ACME REFINING CORPORATION
12-34 LISTER AVE., NEWARK, N. J. Tel.: MArket 3-4670

ETHYLENE IMINE

now available in **two grades**

high purity —b.p. range 55°-57°C.
technically pure—b.p. range 54°-61°C.

CHEMIRAD CORPORATION
P.O. Box 152, Port Washington, L. I., N. Y.
Phone: Port Washington 7-1341

Make SHELL your headquarters

Methyl isobutyl ketone is a medium-boiling, active solvent for a wide range of materials used by industry.

In surface coatings of the nitrocellulose and vinyl types, MIBK has excellent solvent characteristics and good tolerance for many hydrocarbon diluents. These same characteristics recommend MIBK for use in lacquer thinners.

As a selective solvent, MIBK is used as an extractant in the manufacture of antibiotics and in the de-oiling of paraffin wax. It finds use, too, as a solvent for synthetic rubber cements and other adhesives.

MIBK is also used in the manufacture of such products as fungicides, textile coatings, leather finishing, pharmaceuticals, germicides and the denaturing of ethyl alcohol.

Your Shell Chemical representative will gladly discuss your specific solvent needs with you. For your files, write for: *Organic Chemicals*, a catalog of Shell Chemical solvents, resins and intermediates.

SHELL CHEMICAL CORPORATION
CHEMICAL SALES DIVISION 380 Madison Avenue, New York 17, New York

Atlanta • Boston • Chicago • Cleveland • Detroit • Houston • Los Angeles • Newark • New York • San Francisco • St. Louis
IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited • Montreal • Toronto • Vancouver

SHELL

In coal chemicals

Look To KOPPERS

for uniformly high quality and reliable, prompt service

TAR ACIDS

Phenol
Cresol
Cresylic Acids
Xylenol
Special Blends

COAL TAR AROMATIC HYDROCARBONS

Benzol
Toluol
Xylol
Solvent Naphtha

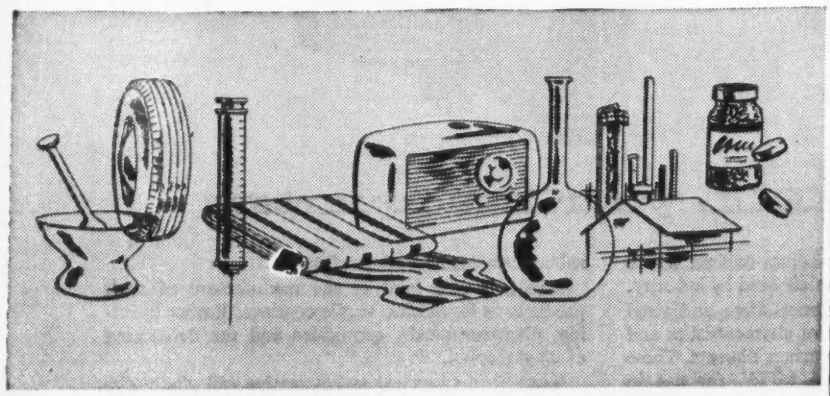
TAR BASES

Pyridine
Picoline
Lutidine
Collidine
16-20 Grade
Toluidine
Quinoline
Isoquinoline
Quinaldine
Q.S.R. Bases

ALSO:

Naphthalene
Anthracene
Ammonium Sulfate
Ammonium Thiocyanate

Write for full information: Koppers Company, Inc., Tar Products Division, Dept. 120 Q, Koppers Building, Pittsburgh 19, Pa.



KOPPERS
COAL CHEMICALS

Coal Chemicals

Cokeoven operators continued to mark time last week as petrochemical companies hammered out new price schedules for toluene. The toluene reductions placed an added strain on cokeoven sources already burdened for many months with heavy toluene inventories. Observers indicated that a thorough review of the situation was being made to determine what the ramifications would be for steel companies throughout the industry. Xylene was in good balance and there was no indication of any changes in this market. Benzene was unchanged from reports of the past several weeks. Phenol demand continues to lag while styrene was listless although some sources reported an indication of an upturn in the latter market. Naphthalene sources continued to cite long range prospects as favorable, but the current picture cast something of a cloud on the horizon. Cheaper import material from Russia and her satellites posed a problem as well as the somewhat extended slump which has enveloped the phthalic anhydride market. Prospects for an increase in demand in the latter market in the early spring were felt to have failed to come up to expectation. Some trade sources felt the current difficulty might have been caused by overproduction on the part of some producers early in the year. Observers again pointed out that overall business activity was being maintained at a good level as witnessed by financial reports of the first six months but that there was a continuing feeling of uncertainty on the part of many industry people.

Creosote was running in moderate volume. Replacement of railroad ties, poles and pilings was regarded as an established outlet which would continue to make withdrawals at a routine pace. Reports were optimistic for the use of creosote in pressure treated wood in the federal highway building program.

American Iron and Steel Institute estimated that steel production in the week ended August 11 would amount to 81.7 percent of theoretical capacity equivalent to 2,092,000 net tons of steel. Output of steel was 2,033,000 net tons in the week previous, 2,015,000 in the comparable week one month ago and 1,415,000 tons in the corresponding week one year ago.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 10, 1956
118.18	118.18	118.19	114.89

For Current Prices See Page 9

Basic Products

Benzene — Stocks were maintained slightly in excess of balance as has been the case for several weeks. Phenol outlet was poor and styrene was as yet listless. There were some indications however that the latter market was beginning to perk up and prospects for the coming weeks were felt to be very good. Cokeoven sources maintained prices at long established levels. Material was readily available from major producers in both steel and petroleum industries.

Creosote — Demand for creosote for railroad tie replacement was proceeding at a moderate pace according to trade reports of last week. Advanced technology and improved technics of wood treating in recent years were said to have added to the average life of poles, crossties and pilings. Whereas railroads could expect to replace ties in eight to ten years previously, ties and poles may now last two and three times as long. Producers continue to express optimism about use of creosote in treating wood used in completion of the proposed federal highway program slated to extend over the next fifteen years. Past experience in toll-road construction was said to have shown that these roads use an average of 755 right of way fence posts and 257 guardrail posts per mile. Such a prospect for the use of creosote in pressure treated wood was felt to be more than grounds for the current optimistic reports of creosote makers throughout the industry.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending August 4 was as follows:

Ammonia liquor	lbs.	813,720
Ammonium sulfate	lbs.	34,648,759
Benzene	gals.	3,097,389
Coaltar	gals.	15,224,454
Creosote	gals.	590,603
Naphthalene, crude	lbs.	3,294,257
Pyridine (2°C)	lbs.	11,812
Toluene	gals.	682,475
Xylene	gals.	196,867

Cresylic Acid—Conditions in the market were substantially unchanged from previous reports. Sales have been lagging and some sources indicated that projections for the past two months have not been realized. It was felt that demand for cuts used in the production of resins has failed to take up the slack left by dwindling demand for tricresyl phosphate grades. Prices were unchanged at levels previously established in the trade. Stocks were readily available on all grades, which was said to be in contrast to the situation prevailing earlier in the year when some cuts were reported in tight supply and the situation overall was more nearly in balance. Observers felt that current plant shutdowns for vacations were a major factor in the slow aspect evident in this market during the past few weeks.

Naphthalene — This market continued in an unsettled position as a result of surplus stocks which have accumulated over the past few months together with the influx of Russian material reportedly selling at 4c. to 4½c. per pound. The current poor demand for phthalic anhydride was accounted a major factor in the backing up of naphthalene. Although trade sources continued to express optimism in regard to long range prospects in both of these markets it appeared evident that the current picture leaves much to be desired, especially concerning naphthalene. It was hoped that the automobile industry would up demands for alkyd resins in the near future and thus perk up phthalic demand which would in turn afford naphthalene producers some relief. It was again pointed out though, that the impact of automobile production in these chemical markets has been highly over rated by some people.

Refined naphthalene for moth prevension was moving at a normal seasonal rate, but it forms a very small portion of the total market. Due to its exact melting point and a definite rate of expansion between melting and freezing points, mothballs have helped iron out difficulties encountered by producers of airplane instrument systems. The use of naphthalene in instrument heaters makes it possible to maintain a temperature of 175.8 degrees Fahrenheit.

Phenol—Major producers again pointed to long range expectations as a reason for the current overcapacity in this market. Estimated consumption by 1960 has been placed at 600 million pounds. Since the resins market forms approximately 50-60 percent of demand and more than half a pound of phenol is required in making one pound of a phenolic resin, it was felt that future requirements could tax facilities to their full extent. However, at present, there was no shortage of phenol. Stocks were readily available in quantity for prompt shipment. This was in sharp contrast to the relatively tight supply situation which was in evidence in some quarters at the close of 1956. Prices were firm and unchanged at levels long established in the trade. Observers were confident that the next few weeks would show improvement in this market for both synthetic and natural phenol. The latter material continues to show good progress toward taking a greater portion of the market although it was pointed out that total consumption still constitutes less than 10 percent of the market.

Solvent Naphtha—Sales of crude, heavy solvent totaled 524,306 gallons in May of

Coal Chemicals

this year as compared to 566,098 gallons in the comparable month one year ago. Sales of this material for the calendar year through May totaled 2,466,909 gallons as compared to 2,406,425 gallons for the first five months of last year. Trade sources indicated that the bulk of production went to distillers for by-product extraction. Industrial solvent uses for reclaiming rubber and the like continued limited. Refined, light solvent sales in May were 11,525 gallons as against 18,448 gallons in May, 1956. Total sales of refined, light solvent in the calendar year through May were 109,480 gallons and 66,948 gallons for the like period last year. Prices of long standing were unchanged.

Toluene—Cokeoven operators continued to regard the market closely in the light of new price schedules established last week by petrochemicals makers. It was uncertain at the close of the week exactly what action would be taken in steel circles, but self evident was the fact that cokeoven sources have been burdened by heavy inventories for many months and that the reductions bring petroleum prices even to, or under, those of the steel companies at virtually all shipping points.

Xylene—Supply and demand continue in good balance according to trade reports of last week. There was no indication of any change in market conditions which have prevailed for many months. Price was firm and unchanged.

Intermediates

Maleic Anhydride—Trade sources generally accounted this a "good market." Continued production expansions in recent years have been justified as new and diversified uses have come about. Demand for maleic for use in making polyester resins was said to be holding up well and continues to show promise for rapid growth. A major producer recently announced the expansion of capacity to 40 million pounds per year or an enlargement of 10 percent on current facilities. Alkyd based paints and coatings were among other major outlets for maleic. Sources reported, as in other markets, that a seasonal slackening in the business pace was noticeable in this market, but prospects for the remainder of the year were felt to be very good. Price schedules established by major producers January 1 of this year were firm and unchanged. Preference in the trade continues to be for flake material, it was said.

Phthalic Anhydride — Trade sources regarded this market with great interest. Demand has been poor of late and it was felt in some quarters that if a sustained upturn in demand was going to take place this year, it would have to make itself felt in the near future. Some sources indicated that trade needs during July had not been as slack as might previously have been supposed and even anticipated an increasingly brisk note to be sounded in the current month. As yet, there was little evidence of such a change. Demand for alkyd resins which was estimated to take in approximately 60 percent of the market continued dull and industrial uses were likewise without feature. Prices established in October of last year were unchanged and firm. Competitive pressures in this, as in most volume aromatic chemicals markets, was felt to have been stepped up noticeably during the year. Sources pointed out again that the overall high level of business activity of last year was being pretty well maintained and that slowdowns were only a leveling off in growth rate.

Salicylic Acid—Major producers reported unchanged prices from the levels of April 1, when technical salicylic acid as well as refined material and a general line of medicinal salicylates were boosted. Some sources felt that consumers might still be living off of stocks taken in before the April increase.

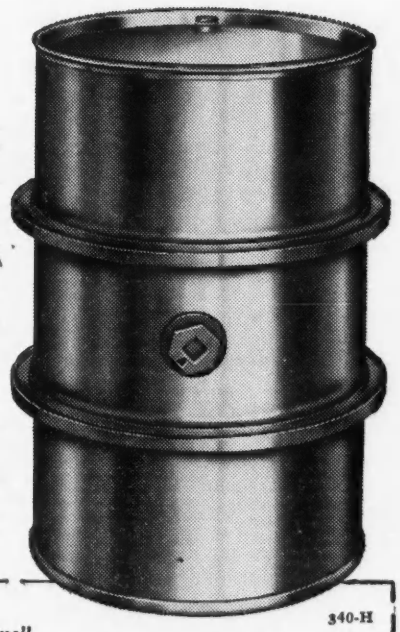
Manufacturers of
BENZYL ALCOHOL
BPC
Benzol PRODUCTS COMPANY
237 SOUTH STREET
NEWARK 5, NEW JERSEY
Manufacturers of Fine Chemicals

CIBA
Ortho
Phenylene Diamine
New Technical Bulletin, Prices, etc. Now ready!
CIBA
CIBA COMPANY INC.
627 Greenwich St., New York 14, N.Y.
Please send me CIBA Chemicals Catalog
NAME
COMPANY TITLE
ADDRESS
CITY STATE

IRON FILINGS
(GROUND CHEMICAL IRON)
ELIZABETH 1, NEW JERSEY: 200 S. SECOND ST.
CONNELLY, INC.
SINCE 1876
CHICAGO 8, 3154 S. CALIFORNIA AVE.

whether you need 1 or a carload
CALL ON INLAND
FOR HIGH QUALITY
STAINLESS STEEL
DRUMS

If you ship chemicals, acids, pharmaceuticals, foods or other products that require the extra protection of stainless steel, it will pay you to check the many advantages of Inland Stainless Steel Shipping Drums. Manufactured in a range of sizes from 15 to 60 gallons, from many types of stainless steel, with double-seamed or all welded construction, with all modifications necessary to meet ICC specifications 5 and 5C. Inland can supply the right drum for your requirements . . . whether you need 1 or a carload!



One of Inland's Stainless Steel Shipping Drums. An ICC 5C drum, 55 gallon, 16 gage, all welded construction (flanges, heads, bottoms and side seams) I-bar rolling hoops. Many other sizes and types are available. Call on Inland for your process drums and stainless steel shipping pails too!

"The Use and Care of Stainless Steel Drums" 340-H
Here is a useful, new booklet. It gives valuable information on how to use and get maximum life from stainless drums and fully describes the Inland line. Send in this coupon for your free copy.

Also:
_____Have your representative contact me.
_____Give me a quotation on_____ICC_____Drums.

Name_____Title_____
Company_____
Address_____
City_____Zone_____State_____

INLAND STEEL CONTAINER COMPANY 340-H
Division of Inland Steel Company • 6532 South Menard Avenue Chicago 38, Illinois • Plants: Chicago, Jersey City, New Orleans, Cleveland and Greenville, Ohio
Full line of steel and stainless steel shipping containers, including galvanized and heavy duty ICC drums.

If it's
PHENOL *you need*
YOU CAN DEPEND ON DOW
CALL OUR NEAREST SALES OFFICE OR WRITE: THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Chemicals you need . . . FAST

Baker ready with big stocks to meet customer demands

WHEN YOU NEED fine or industrial chemicals in a hurry, you can rely on J. T. Baker's large and well-balanced stocks.

Call on Baker for the "rush" chemicals you need for new development projects—for emergencies—for prompt shipment to expedite forecasting and planning. Whenever you must replace your stocks of ingredient or process chemicals, you can depend on J. T. Baker for fast, meticulous service.

For *all* your chemical needs, telephone, wire or write us at Phillipsburg or one of our branch offices. Our large Chicago warehouse stocks are available to mid-west customers.

BRANCH OFFICES:
122 East 42nd Street
New York 17, New York
6908 Market Street
Upper Darby, Pennsylvania
435 N. Michigan Avenue
Chicago 11, Illinois
170 East California Street
Pasadena 1, California

J. T. Baker Chemical Co.

REAGENT CHEMICAL FINE INDUSTRIAL

Phillipsburg, New Jersey

Drugs, Fine Chemicals

Recent fluctuations in silver bullion were reflected in an advance in silver nitrate and sources indicated that a change was pending on silver cyanide. The magnitude of the latter change was expected to be in the order of one-half cent per ounce. Otherwise, drug and fine chemicals markets were quiet last week according to most trade reports. The change in caffeine two weeks ago was not reflected in caffeine citrate and reports from major producers indicated that since volume has dwindled noticeably on the citrate, it was uncertain if there would be a change in price. It was largely a matter for speculation as to what effect the reduced caffeine price would have on caffeine imports.

Activity in cinchona derivatives was at a seasonally active level. The advance on quinidine sulfate of two weeks ago was maintained by major producers and attributed to increased ocean freight rates as well as handling and packaging costs, which it was felt could no longer be absorbed. Stocks were adequate for current needs, it was said. Price structure in quinine salts was steady and unchanged from last reports.

A change in mercury metal was not reflected in pharmaceutical mercurials and it was felt by most observers that no change in these latter materials was in prospect. It was pointed out that mercurial salts have seldom responded to fluctuations in the metal unless they are of a sweeping nature. Pharmaceutical demand was dull and featureless. The same might be said of bismuth salts, the most active being nitrate and subcarbonate which continue to find limited use pharmaceutically.

Vitamin markets were unchanged substantially from reports of two weeks ago. Price structure was regarded firm after the extensive changes which have taken place in B-vitamins since the first of the year. Calciferol was moving in moderate volume to the food industry as was the case with niacin. The latter material continues somewhat weak especially in feed grade mixes. Some sources felt that the added production capacity of recent years has brought the industry to the saturation point. It was noted that the FDA has for the first time established minimum daily requirements for niacin and changed the MDR for riboflavin.

Antibiotics were unchanged in price and steady according to reports from major producers. Penicillin price was firm and observers reiterated that domestic producers would make serious efforts to hold the price line. Last price change in the market occurred early in the year when penicillin salts along with streptomycin and dihydrostreptomycin were advanced to the current levels.

Camphor tablets continued to face moderate demand from the trade for accounts manufacturing moth-proofing products. Powder was running at a normal seasonal pace. It was felt to be a little too early for any sustained den and on the powder. Prices were unchanged after the reduction on tablets in May. The decline was instituted in an effort to combat the substantial amount of competitive pressure from imports.

Ammonium Salts—USP granular chloride was listed at 17¼c. per pound in 250 pound fiber drums. Sulfate was 10c. per pound in 300 pound drums, 5 drums or more, while single drum lots were priced at 10½c. per pound. Granular, dibasic ammonium citrate remained at 77c. per pound in 250 pound barrels while a hundred pound fibe drum was available at 82c. per pound. Ammonium thioglycollate was unchanged at $1.30 per pound for commercial grade and thioglycollic acid was similarly priced. The latter materials continue to find extensive use in cold wave solutions and home permanent kits. Trade reports indicate that domestic producers have largely withdrawn from the market in crystalline ammonium thiosulfate, a chemical which finds its widest use in the photographic industry. Imported CP material was available, duty-paid, priced at 34c. per pound in 200 pound lots. A more stable mixture, consisting of 80 percent ammonium thiosulfate and 20 percent sodium thiosulfate, was listed at 32c. per pound, same quantity.

Price Trends

Advanced

Silver nitrate, ²₃c. per oz.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
63.85	63.85	63.86	65.85

For Current Prices See Page 9

Ascorbic Acid—Material continued to move in good seasonal volume. Price was unchanged from reports of two weeks ago. The development of widely diversified uses over the past several years has brought production of bulk ascorbic acid and salts to 2.5 to 3.0 million pounds annually. Pharmaceutical use in capsules, tablets and parenterals continues strong while antioxident use was felt to constitute a growing market outlet. Ascorbic utilizing an ethylcellulose coating was moving into the anti-cold formulations field since the latter often contain materials not amenable to tableting. Market for ascorbic acid and citrus bioflavonoid combinations for cold prevention was said to have grown substantially and it was felt that potential was even greater despite some clinical controversies as to the efficacy of such preparations.

Bismuth Salts—Demand was said to be continuing in a routine manner. Outlets for pharmaceutical use have narrowed in recent years due to the influx of more potent synthetics. Subcarbonate and nitrate salts were in moderate demand, it was said. Stocks were readily available from major producers. Prices were unchanged from those levels which have long been established in the trade.

Caffeine Citrate—Price was unchanged in the wake of reductions on hydrous and anhydrous caffeine two weeks ago. Trade sources indicated that use has declined in recent years to a point where price change in the caffeine market might not necessarily be reflected in caffeine citrate. Sources quoted caffeine citrate at $2.70 per pound.

Calciferol—Crystalline material in kilo lots was listed at 60c. per gram from major producers. Sources indicated that price was firm and demand continung at a steady pace from accounts in the food industry. There was little indication of a change in demand patterns in this market. Observers felt that the current volume would be sustained and would continue to move into established consuming channels for well defined end uses.

Camphor—Dealers continued to do a moderate volume of business in tablets, used for moth prevention. Powder was running at a normal rate and it was thought to be a little early to expect sustained demand. Pricewise, paradichlorobenzene was competitive to camphor tabs in the moth prevention market but, it was pointed out, where lasting power is concerned, the latter material was felt to be superior. Prices were unchanged after the 5c. per pound reduction on camphor tablets in late May. Price change was instituted at that time in an effort to relieve the competitive pressure of imports.

Lactates — Price quotations of major producers on calcium, sodium and potassium lactate were unchanged from last reports. Trade sources observed a more brisk tone in calcium lactate demand over the past several weeks. A similar spurt noted early in the spring for potassium lactate had largely died down, it was said. In any case, trade needs were said to be at a low volume both as a result of seasonal influences and the fact that these materials currently find limited use.

Mercurials—A change of roughly $3 in mercury metal was not reflected in mercurial salts. Trade sources contacted pointed out that fluctuations in metal are seldom reflected in mercurial salts. Pharmaceutical use continues at a low volume, it was said. Ammoniated mercury or white precipitate is the only mercurial salt included in the current USP. Yellow mercuric oxide, red mercuric iodide and calomel were among the list of materials to be admitted to National Formulary X.

Monosodium Glutamate—Price was un-

From Heyden Newport

SODIUM BENZOATE
U.S.P. – preservative for foods, beverages, medicinals. Technical – industrial preservative, corrosion inhibitor, intermediate.

BENZOIC ACID
U.S.P. – preservative for foods, beverages, medicinals. Technical – alkyd resin modifier, dye carrier, intermediate.

PARASEPTS®
Methyl, ethyl, propyl and butyl parahydroxybenzoates, purified and technical. Effective bacteriostatic-fungistatic agents.

PROPYL GALLATE
Potent antioxidant for the stabilization of edible fats and oils against rancidity. Stabilizes vitamin A, essential oils, waxes and other products.

Write for detailed information
HEYDEN NEWPORT CHEMICAL CORPORATION
342 Madison Avenue • New York 17, New York
Where tradition meets tomorrow in chemical progress

Greeff
SERVING THE CHEMICAL INDUSTRY SINCE 1880

NATURAL VITAMIN A and D CONCENTRATES

Wide range of Potencies
Available for Prompt Shipment

We invite your Inquiries

Manufactured by
COLLETT-WEEK CORPORATION
Ossining, New York

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK, N. Y.
TRIBUNE TOWER, CHICAGO, ILLINOIS

NYSCAPS®
PHENYLPROPANOLAMINE
HCl 75 mgm
Now available for over the counter use.

FOR MORE INFORMATION WRITE OR CALL FOR YOUR AUGUST ISSUE OF NYSCO NEWS & NOTES

NYSCO laboratories, inc.
34-24 VERNON BOULEVARD, LONG ISLAND CITY 6, NEW YORK
RAvenswood 6-5800 *Cable:* NYSCOLAB, NEW YORK

Drugs, Fine Chemicals

changed from previous reports. Carload quantities were available from major producers at $1.15 per pound in 100 pound fiber drums. Lots of 25 drums up to carloads were listed at $1.23 while 1 to 24 drum lots were $1.27 per pound. Stocks were adequate for the current needs of the trade. Use as a flavor enhancer in the food industry continues to form the bulk of market volume while therapeutic and pharmaceutical uses were felt to be growing.

Niacin—Price was unchanged from previous reports, according to trade sources queried last week. USP material was moving in seasonally moderate volume to consumers in the baking industry for fortification purposes. FDA has for the first time set minimum daily requirement for niacin of 10 mg. for an adult, 7.5 mg. for a child six years or older and 5.0 mg. for a child less than six years old.

Penicillin—Price was unchanged, market quiet. Production continues to be maintained at a higher level than last year. Supply and demand were in good balance after the relatively tight situation reported earlier in the year. A report indicates that the American Veterinary Medical Association has withdrawn its request for a public hearing on an FDA proposal to limit to 100,000 units each, the dosage of penicillin drugs used for treating mastitis in cattle. FDA's proposal will become effective August 14. It was pointed out that the withdrawal was agreed to with the understanding that should the dosage limitation fail to appreciably diminish the amount of penicillin in milk, further consideration would be given to restriction of penicillin veterinary products to prescription basis.

Silver Salts—Fluctuations in silver bullion during the past two weeks were reflected by an increase in nitrate salt. The cyanide was unchanged although it was expected to move ½c. in line with the ⅜c. boost in nitrate. Activity in the market is the first since June when cyanide was dropped ⅝c. per ounce and nitrate was lowered by ½c.

Botanicals

Dealers in large volume domestic botanical drugs continued to report some improvement in the generally quiet tone which has prevailed in crude drug markets since the beginning of the year. Some dealers indicated that demand from the pharmaceutical industry could be expected to show a gradual cumulative increase from now until the beginning of the fall season. Collections of new crop cascara segrada were reportedly on a level with those of last year. Price ranged from 31-33 cents per pound for new crop while old crop material remained at 36 cents. Favorable growing conditions have contributed their share of impetus to what were generally believed to be adequate collections of items in the domestic market. New crop golden seal root was expected late this month or early next month. Current stocks are tight as has been the case for many months and closely held. Price was firm in view of the continued scarcity of root. It was uncertain if this situation would change with new collections or not.

Arrivals of papain shipments in this country are somewhat more frequent, it was said. Continued rejections of shipments here had previously made sellers at primary centers reluctant to enter the market. Despite this, conditions on the domestic scene are essentially unchanged. Dealers were uncertain as to whether any way could be found to recondition detained material to pass FDA inspections. Due to the unsettled conditions, buyers were largely on the sidelines.

Cascara Segrada—Price was unchanged from last reports. Dealers in large volume domestic botanical drugs continue to wax enthusiastic about propspects in this market. Collections were accounted on a par with last year. Price of old crop material was unchanged while new crop was listed ranging from 31c.-33c. per pound. Stocks were adequate for current needs.

Cyanamid, Ill. Powder

—Continued from page 3

company to give better service to its present customers, at the same time providing service to new customers who prefer to contract nationally for these products."

The latter include many large contractors who expect to work on the federal road-building program now under way across the country. Cyanamid's explosives sales, until now, have been largely confined to states east of the Mississippi river. Illinois Powder sales have been largely concentrated west of the Mississippi.

"In the next few years, consumption of industrial explosives in all major consuming industries, including metal mining, quarrying non-metal mining and the construction industries, is expected to grow," Mr. Towe continued. It is estimated that by 1960 the construction industries, stimulated by the Federal Highway Program, will consume approximately half of the country's annual output of industrial high explosives.

Under terms of the acquisition agreement, Illinois Powder Company stockholders will receive 88,000 shares of Cyanamid common stock.

Illinois Powder, which is fifty years old this year, manufactures high explosives, including gelatin, ammonia, and nitroglycerin dynamite, and permissible powders.

Ancient Antibiotics . . .

Strictly speaking, anything that destroys life is an antibiotic and these medieval weapons were undoubtedly very effective in their day.

You'll find nothing like them at Penick! But you will find the broadest range of the more conventional, modern antibiotics available from any single supplier! Since we sell in bulk only, serving makers of pharmaceuticals, cosmetics, veterinary medicines and animal feeds, we make and stock many of the antibiotics in regular commercial use.

Our diversified line simplifies your purchasing and better enables our experienced technical staff to assist you in developing effective combinations compatible with your formulations.

We will be glad to quote on your needs and to send samples of Penick antibiotics so you can judge their exceptional quality for yourself.

Of particular current interest . . .

NEOMYCIN BACITRACIN TYROTHRICIN GRAMICIDIN

Facilities are available for custom manufacturing in fermentation chemistry

PENICK

S. B. PENICK & COMPANY
50 CHURCH ST., NEW YORK 8 • 735 W. DIVISION ST., CHICAGO 10
Manufacturers of Fine Chemicals and Drugs

FDA Drug Import Law Is Passed by the House

House bill 6456 which relaxes penalties on imports of foods, drugs and cosmetics found later to be in violation of Food and Drug Administration law, was passed by the house and sent to the senate for concurrent action last week. House approval of the bill was unanimous.

The bill was sponsored by FDA to correct a construction that has been placed on the law by the courts which unduly penalizes innocent violators of the law. As explained by Commissioner George D. Larrick, of FDA, to the house interstate commerce committee (OPD 8/5/57), the bill will permit the re-export of the articles found in violation of the law under certain conditions.

As it is now, the importer has only the choice of reconditioning the articles or destroying them.

Dyes Picture

—Continued from page 7

9.4 million pounds or 25 percent less than the 12.5 million pounds reported in 1955, and that of direct black EW (C.I. dye 581) was 5.4 million pounds, or 12 percent less than the 6.1 million pounds reported in 1955.

Decreased output in 1956, compared with 1955, was reported also for chrome blue black R (C.I. dye 202) (a decline of 70 percent); indanthrene brown BR (Pr. dye 118) (a decline of 44 percent); anthraquinone vat green B and black B (C.I. dye 1102) (a decline of 37 percent); and algol yellow GC (Pr. dye 9) (a decline of 35 percent).

Four chemical classes of dyes accounted in 1956 for 82 percent of the total quantity of all dyes produced: Azo dyes accounted for 34 percent of the total; anthraquinone vat dyes, for 19 percent; sulfur or sulfide dyes, for 21 percent; and indigoid and thioindigoid dyes, for 8 percent.

The output of all these dyes, except sulfur dyes, was smaller in 1956 than in 1955. Production of anthroquinone vat dyes declined 27 percent; indigoid and thioindigoid dyes, 21 percent; and azso dyes, 15 percent. The output of sulfur dyes increased 26 percent.

With respect to class of application, two classes of dyes accounted for more than half of the total output of all dyes in 1956; vat dyes accounted for 32 percent of the total output and direct dyes, for 20 percent. The output of both classes of dyes was smaller in 1956 than in 1955; production of vat dyes declined 13 percent and of direct dyes, 8 percent.

Three chemical classes of ungrouped dyes accounted for 85 percent of the total output of these dyes in 1956. Azo dyes accounted for 41 percent of the total output; stilbene dyes, for 26 percent; and anthroquinone vat dyes, for 18 percent. The output of stilbene dyes was 16 percent larger in 1956 than it was in 1955, whereas the output of ungrouped anthraquinone vat dyes was 15 percent smaller in 1956 than it was in 1955 and the output of azo dyes was 2 percent smaller.

For ungrouped dyes arranged by class of application, three classes of dyes accounted for 72 percent of the total output of these dyes; direct dyes accounted for 40 percent, vat dyes for 18 percent, and acetate rayon dyes, for 14 percent.

The output of all three of these classes was smaller in 1956 than it was in 1955. Production of ungrouped vat dyes declined 25 percent, acetate rayon dyes, 20 percent, and direct dyes, 3 percent.

The production of azoic dyes and their components in 1956, totaled 8.1 million pounds, or 19 percent less than the 9.0 million pounds produced in 1955. Sales of these products were 7.0 million pounds, valued at $13.6 million, in 1956, compared with 7.9 million pounds, valued at $14.2 million, in 1955—a decline of 11 percent in quantity and 4.2 percent in value.

Except for the rapidogens—production of which increased 11 percent in 1956 compared with 1955—the output of the remaining three groups declined in 1956 compared with 1955. The output of fast color salts declined 18 percent, while that of the fast color bases and the naphthols declined 8 percent.

Selenium Important

—Continued from page 7

of selenium even as low as one part in 100,000 parts of diet are toxic to chickens, and crops grown on soil containing selenium are sometimes poisonous to animals.

The discovery was made possible by using a special diet which was low both in selenium and vitamin E. The diet contained an unusual yeast called "torula yeast," or "wood yeast," as a source of protein.

This diet was fed to baby chicks and within three weeks they showed a nutritional disease indicated by loss of appetite, slow growth and a noticeable swelling under the skin caused by leakage of fluids from the blood vessels into the swollen area. Most of the chickens died before they were a month old.

The disease was completely prevented by adding either vitamin E or pork kidney to the original diet. The effect of pork kidney was due not to vitamin E but to an unknown substance which at first was thought to be a new vitamin.

It was then found that the unknown substance was a volatile mineral which formed a non-volatile calcium salt. Selenium, one of the few mineral substances which fitted these properties, proved to be the unknown substance.

Similar findings have been made by researchers at the National Institutes of Health Laboratory in Bethesda, Md.

Electromet Post Filled

Stanley M. Norwood has been appointed assistant to the president of Electro Metallurgical Company, New York, a division of Union Carbide Corporation. In addition to his new responsibilities, Mr. Norwood will continue as vice-president of Electromet.

FOUNDED T & B 1856

Phone Algonquin 5-1588

Over A Century of Service

GUMS

Arabic Karaya Tragacanth

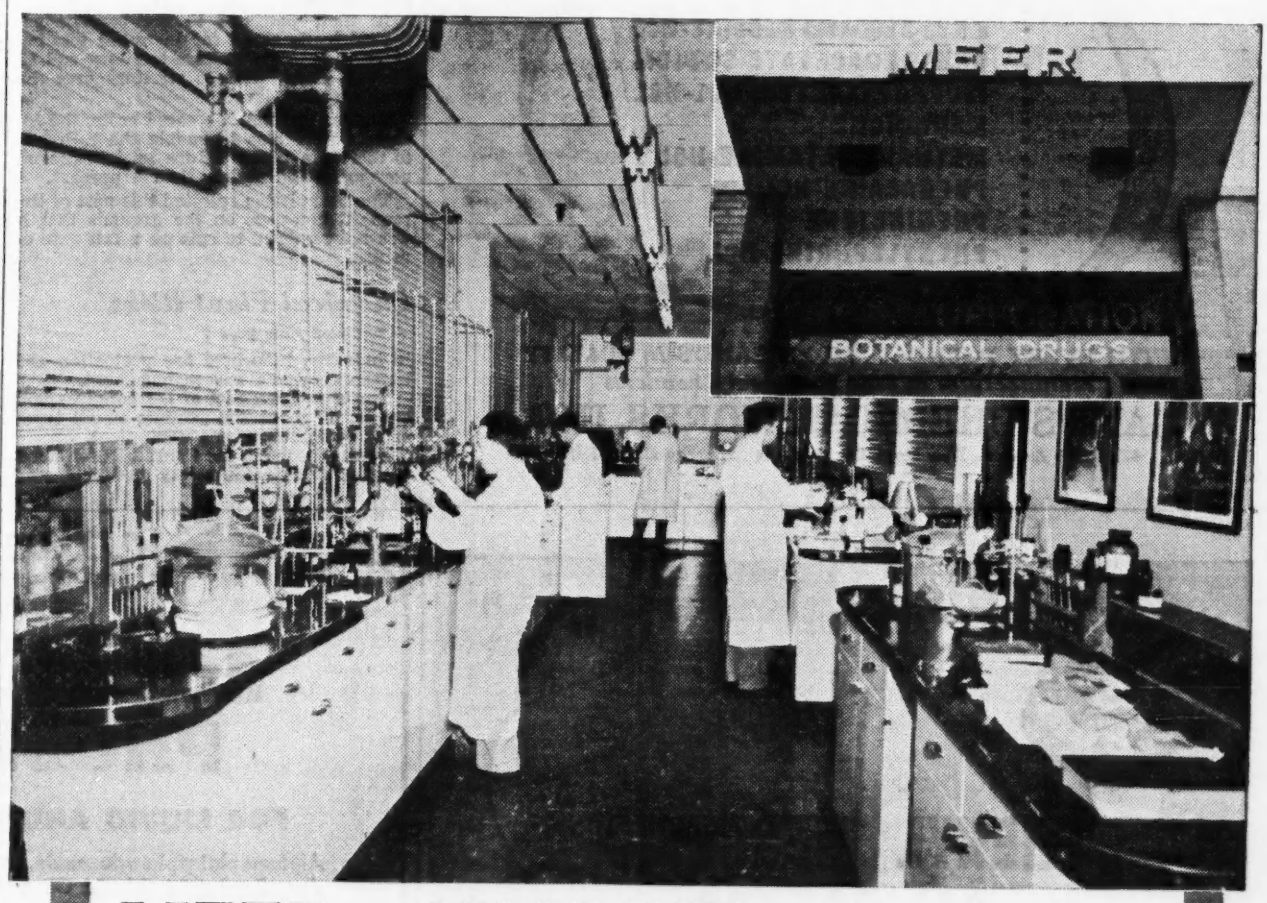
Textile Print Gum (Tab-A-Tex)

Locust Bean Guar

THURSTON & BRAIDICH

286 Spring St., New York 13, N.Y. • Agents in Principal Cities in U.S.A.

Warehouses: P. N. SODEN & CO. LTD.—2143 St. Patrick Street, Montreal, Canada
A. C. DRURY & CO. INC.—219 East North Water Street, Chicago, Illinois
MELVIN VINCENT ASSOC.—1807 East Olympic Blvd., Los Angeles, California
M. O. GROVE & CO.—310 Sacramento Street, San Francisco, California



MEER & QUALITY a successful partnership

Quality, built into your products consistently, makes them something special — outstanding — and the first choice in your markets. In the long run, quality is the mainspring of any business.

MEER features quality. These are factors that have an important meaning to our customers. Their virtue is that your end-products inherit these solid quality values.

This is why so many formulators specify MEER botanicals, gums, drug extracts, resins, tinctures, etc. We maintain currrent crops of *Millions of Pounds* of nearly 700 different botanicals available to you for prompt delivery.

Economize with the best. Write today for your copy of the latest MEER catalog and price list.

MEER CORPORATION

New York: 318 West 46th Street, New York 36, N. Y. • JUdson 6-0900
Cable Address: "Merelis", New York

Chicago: 325 W. Huron Street, Chicago 10, Ill. MIchigan 2-8895

North Bergen, N. J. (Plant): 9412 Railroad Avenue

Meer Corp.

gane's

PABA-Na and K

d & d,l-DESOXYEPHEDRINE-HCL
DEHYDROACETATE-SODIUM
ISOPROPYLARTERENOL-HCL
MENADIONE
METHAMPHETAMINE-HCL
PHENACAINE-HCL
PHENINDIONE
PHENYLEPHRINE-HCL

WITH EVERY POUND . . . MORE GANE'S *in* QUALITY
Manufacturer of Fine Medicinal Chemicals
GANE'S CHEMICAL WORKS, INC.
677 Fifth Avenue, New York 22, N. Y. • Murray Hill 8-2410

DCAT Probes Expense

—Continued from page 7

percent of the companies assume these costs.

Repairs to cars owned by salesmen are about evently divided between the salesman and the employer.

On allowances for entertainment of customers by their salesmen, 62 percent of employers throughout the country replied that this expense is assumed by the company, most of them reimbursing their representatives for the actual amount spent.

Over 90 percent of the companies cooperating in the survey reported in the affirmative on paying the cost of rooms and meals for employees when working away from their home territories. Approximately 81 percent absorb the actual amounts spent, between 12 and 13 percent compensating salesmen by a flat allowance.

Less than 20 percent of reporting companies pay for advertising, donations and like expenditures for their sales force.

Chemical Industry

—Continued from page 3

to cover the increased costs of operation that have been occurring since prior to the increase last December.

In their petitions to the commission, the railroads asked for increases totaling 22 percent in the eastern territory and 15 percent in the western territory over the pre-December levels.

Besides meeting increased costs, the increases were also to enable the railroads to receive a better return on investment, now estimated at less than 4 percent.

The commission rejected this part of the request, however, on the grounds that it was not required to rule on a fair rate of return.

Chemical Plant Risks

—Continued from page 7

in industry, industrial fire protection and human relations and management.

The exposition part of the congress will consist of about 200 exhibits on all types of accident prevention equipment.

Exhibit space in the Conrad Hilton hotel will be filled with safety products, and with equipment and services related to the promotion of safety, health, first aid, sanitation and general welfare.

The list of speakers will include:

Dr. Robert A. Kehoe, head of the department of preventive medicine and industrial health, College of Medicine, University of Cincinnati, Cincinnati, Ohio.

G. M. Kintz, district supervisor, health and safety, Department of the Interior, Bureau of Mines, Dallas, Tex.

Howard H. Fawcett, safety director, research laboratory, General Electric Company, Schenectady, N.Y.

E. G. Meiter, director, industrial hygiene division, Employers Mutuals of Wausau, Milwaukee, Wis.

They will be among the 900 speakers at the 1957 congress, appearing at 300 sessions.

LOOK FIRST TO
LINDSAY
WORLD'S LARGEST PROCESSOR

CERIUM
OTHER RARE EARTH
THORIUM CHEMICALS
•
A GRAM OR A CARLOAD

Write for free copy of Bulletin P-10 for technical data and small lot prices

LINDSAY CHEMICAL COMPANY
250 ANN STREET, WEST CHICAGO, ILL

METALSALTS CORPORATION

PHENYL MERCURIC COMPOUNDS
•
ETHYL MERCURY COMPOUNDS

METALSALTS* CORPORATION *Manufacturing Chemists*
200 WAGARAW ROAD, HAWTHORNE, N. J.
HAwthorne 7-6000 New York: PEnnsylvania 6-2626
*EXCLUSIVE SALES AGENTS FOR DAR-SYN LABORATORIES, Incorporated and HAWTHORNE LABORATORIES, Incorporated.

ARAPAHOE
TRADE-MARK

SCINTILLATION PHOSPHORS

FOR LIQUID AND PLASTIC COUNTING

Alphanaphthylphenyloxazole, ANPO, A **Band-Shifter** or Secondary Solute, for Liquid Counting—Fluorescence Max. 4050 A.

Diphenyloxazole, DPO, A **Primary Solute,** for Liquid Counting—Fluorescence Max. 3800 A.

Phenylbiphenylyloxadiazole, PBO, a **Primary Solute,** for Liquid Counting—Fluorescence Max. 3700 A.

POPOP, A **Band-Shifter** or Secondary Solute, for Liquid Counting—Fluorescence Max. 4200 A.

p-Terphenyl, Least Expensive **Primary Solute,** for Liquid and Plastic Counting—Fluorescence Max 3460 A.

Tetraphenylbutadiene, TPB, For Use with p-Terphenyl in **Plastic Scintillators**—Fluorescence Max. 4320 A.

Cadmium Propionate, anhydrous, A Highly Efficient **Neutron Captor**—Cadmium Content: 43.5%.

Available from stock or from our Distributor, together with his many services in this field—write to Dept. "C" for free booklet on these products.

Exclusive Distributor of
ARAPAHOE Scintillators is TRACERLAB, INC.
of Boston, Mass., and Richmond, Calif.

ARAPAHOE CHEMICALS, INC.
2800 PEARL STREET • BOULDER, COLORADO
PRODUCERS OF FINE ORGANIC CHEMICALS

Vitamin E and (d)

All of our vitamin E products contain only the (d) stereoisomers. This is important, for (d) alpha-tocopherol is the most active alpha-tocopherol stereoisomer; (d) alpha-tocopherol is the form of alpha-tocopherol found in nature.

We make four vitamin E products for pharmaceutical manufacturers.

Distilled Mixed Tocopherols Concentrate N. F. originates from domestic vegetable oils. Molecular distillation and associated processing build up high vitamin E potency. The (d) alpha-tocopherol content is standardized at 50% of the total (d) tocopherol content. Type 4-34 provides 340 mg of (d) tocopherol, or 253 International Units of Vitamin E per gram; Type 4-50, 500 mg of (d) tocopherol, or 372 International Units of Vitamin E per gram. Both are clear red oils with a mild taste and odor—an excellent way to provide the vitamin E in therapeutic and multivitamin capsules. They are also effective antioxidants.

Distilled *d*-Alpha-Tocopheryl Acetate Concentrate N. F., available with either 340 or 476 International Units of Vitamin E per gram, is a clear yellow oil. It is stable to air and to most pharmaceutical materials. Taste and odor are mild. It is wholeheartedly recommended for tablets, gelatin capsules, and drop preparations.

Crystallized *d*-Alpha-Tocopheryl Acetate N. F. is a light yellow, viscous oil at room temperature. With 1360 International Units of Vitamin E per gram, it has the highest biological potency of any commercial vitamin E bulk material we know of. This makes the product readily adaptable to solubilized preparations, tablets, and capsules—wherever the largest dosage of vitamin E in the least bulk is wanted.

Crystalline *d*-Alpha-Tocopheryl Acid Succinate is a nearly tasteless and odorless white powder. At a potency of 1210 International Units of Vitamin E to the gram, it lets you get the maximum dry vitamin E into the least space. It is a most satisfactory material for incorporating vitamin E in tablets and dry-fill capsules, or in other applications where liquid forms of vitamin E are difficult to use. It melts at about 76 C and is stable to atmospheric oxidation.

All four forms of DPi Vitamin E are available for immediate shipment from stock. For information on prices and packaging, write *Distillation Products Industries,* Rochester 3, N. Y. Sales offices: New York, Chicago, and Memphis • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

leaders in research and production of vitamin E

DPi

Also... vitamin A... distilled monoglycerides ... some 3600 Eastman Organic Chemicals for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

IMPORTS at United States Ports

New York

AGAR—35 bls, Consumers Import Co, Yokohama
ALMOND OIL—2 dms, S B Penick, Marseilles
ALOE—20 cs, S B Penick, Cap Haitien
ALUM—4 bgs, Bluefries New York Inc, Piraeus
600 bgs, C M C Chemicals Inc, Liverpool
ALUMINUM FORMATE—52 dms, Aceto Chemical Co, Antwerp
ALUMINUM POWDER—3 dms, American Commercial Transport, Bremen
AMMONIUM BICARBONATE—900 bgs, Chemical Manufacturing Co, Liverpool
AMYRIS BALSAMIFERA OIL—2 dms, Magnus, Mabee & Reynard, Miragoane
ANILINE DYES—21 dms, Sandoz Inc, Havre
35 dms, Nova Chemical Corp, Hamburg
4 cs, Hensel Bruckmann & Lorbacher, Hamburg
73 dms, Hensel Bruckmann & Lorbacher, Hamburg
1 dm, Hensel Bruckmann & Lorbacher, Bremen
2 dms, Francolor Inc, Havre
3 cs, Francolor Inc, Havre
1 pk, Francolor Inc, Havre
46 dms, Havre
1 cs, Havre
ANTIMONY OXIDE—54 bgs, Charles Gitlan, Antwerp
ANTIMONY REGULUS—750 cs, Lentex Metal & Chemical Co, Antwerp
APRICOT KERNELS—100 bgs, Rotterdam
ARABIC GUM—356 bgs, Jacques Wolf, Port Sudan
20 bgs, Meer Corp, Port Sudan
759 bgs, T M Duche, Port Sudan
102 bgs, Lo Curto & Funk, Port Sudan
250 bgs, S B Penick, Port Sudan
106 bgs, Colony Import & Export Corp, Port Sudan
ARSENIC—99 bbls, L J Buck, Skelleftehamn
METALLIC—37 dms, Belmont Smelting & Refining Works, Skelleftehamn
69 dms, Overseas Metal & Ore Corp, Skelleftehamn
BALL CLAY—1,200 bgs, United Clay Mines Corp, Avonmouth
BALSAM, CRUDE—10 dms, Dodge & Olcott Inc, Singapore
BARIUM SULFATE—30 dms, Roussel Corp, Marseilles
BEEF EXTRACT—100 cs, Van Gelder-Fanto Corp, Auckland
BEESWAX—60 bgs, H H Pike, Santiago de Cuba
34 bgs, E Vadillo Ruiz, Santiago de Cuba
97 bgs, Intern Commodities Corp, Valparaiso
73 bgs, Mercantile Metal & Ore Co, San Antonio
83 bgs, Tampico
75 bgs, Havana
32 bgs, Beira
BENTONITE—1,000 bgs, First National City Bank, Leghorn
BENZENE—1 pk, Tar Residuals Inc, London
BENZOIN ALMONDS—14 cs, Meer Corp, Singapore
BERYLLIUM NICKEL—1 cs, Wedeman & Godknecht, Rotterdam
BITUMEN—2,600 bgs, Wilson Carbon Co, Aruba
BLANC FIXE—1,000 bgs, C J Osborn, Rotterdam
BLEACHING POWDER—60 bgs, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—1 dm, Hollander Trading Co, Callao
2 dms, Van Ameringen Haebler Inc, Callao
BRONZE POWDER—43 dms, Mercal International Inc, Liverpool
20 dms, Leo Uhlfelder, Bremen
CALCIUM CARBONATE—1,200 bgs, Pluss-Staufer, Antwerp
1,200 bgs, Nicholas H Weitzner, Antwerp
250 bgs, T D Downing, Hamburg
CALCIUM HYPOPHOSPHITE—11 cs, Oxford Chemical Corp, Bremen
CALCIUM GLUCONATE—12 dms, Baird Rubber & Chemical Corp, Antwerp
CALCIUM LACTATE—34 cs, United Nations Children Fund, Antwerp
CAMPHOR—30 cs, Melamol Corp, Keelung
CAMPHOR OIL—16 dms, Melamol Corp, Keelung
10 dms, Orbis Products Co, Kobe
CAMPHOR, POWDER—30 cs, Magnus Mabee & Reynard, Keelung
40 cs, Manufacturers Trust Co, Keelung
CAMPHOR TABLETS—20 cs, Cosmos Shipping Co, Keelung
20 cs, Manufacturers Trust Co, Keelung
CANDELLILA WAX—339 bgs, Tampico
CARBON—35 cs, American Shipping Co, Bremen
CARAWAY SEED—200 bgs, Louis Furth, Rotterdam
200 bgs, C M Van Sillevoldt, Rotterdam
200 bgs, R J Spitz, Rotterdam
300 bgs, Rotterdam
CARNAUBA WAX—560 bgs, David Levin, Salvador
CASEIN—800 bgs, Borden Co, Chemical Division, Hamburg
1,000 bgs, A J Mills, Auckland
2,000 bgs, Buenos Aires
2,026 bgs, Hamburg
1,500 bgs, Bordeaux
CASHEWNUT SHELL LIQUID—48 tons, Jacques Missir Inc, Cochin
200 tons, Irving Varnish & Insulator Div, Cochin
CASSIA—118 bls, Rotterdam
CASSIA VERA—71 bls, Rotterdam
CASTOR BEANS—107 bgs, Hollander Trading Co, Gonaives
326 bgs, Hollander Trading Co, Port de Paix
127 bgs, Gonaives
CASTOR OIL—88,368 lbs, Woodward & Dickerson, Bombay
469,336 lbs, Wallace & Tiernan Inc, Bombay
304 tons, Baker Castor Oil Co, Rotterdam
CELERY SEED—170 bgs, Louis Furth, Bombay
CELLULOSE ACETATE—10 cs, Celutone Co, Hamburg
CELLULOSE NITRATE—3 cs, Celutone Co, Hamburg
CHINA CLAY—1344 bgs, English China Clay Sales Corp, Avonmouth
CHOLIC ACID—20 dms, James D Irwing, Vera Cruz
CHLORINATED RUBBER—300 bgs, C M C Chemicals Inc, Liverpool
CHROMIUM METAL—84 dms, Continental Ore Corp, Liverpool
CINNAMON—100 bls, Manufacturers Trust Co, Colombo
CINNAMON QUILLS—50 bls, Curacao Trading Co, Colombo
50 bls, Fritzsche Bros, Colombo
50 bls, Colombo
CITRONELLA OIL—15 dms, Lo Curto & Funk, Keelung
25 dms, Consumers Import Co, Keelung
25 dms, Internatio Rotterdam Inc, Keelung
16 dms, Lo Curto & Funk, Hong Kong
CLAY—1 dm, Intern Selling Corp, Marseilles
COALTAR DYES—112 dms, Hensel, Bruckmann & Lorbacher, Rotterdam
4 cs, Rotterdam
COBALT METAL—35 bbls, Dunlap, Alpers & Mott, Kristiansund
COCONUT OIL—25 dms, Procter & Gamble, Manila
500 tons, American Trust Co, Cebu
400 tons, American Trust Co, Cebu
400 tons, American Trust Co, Zamboanga
COD OIL—100 dms, Ottol Oil Co, Bremen
100 dms, Atlas Refining Inc, Hamburg
COPAL GUM—66 bkts, Gillespie Rogers & Pyatt, Singapore
COPPER OXIDE—20 dms, Hamburg
CORIANDER SEED—624 cs, M J Golombeck, Antwerp
625 bgs, Louis Furth, Hamburg
CORN STARCH—400 bgs, Rotterdam
CREAM OF TARTAR—115 bgs, Bank of New York Barcelona
115 dms, Bank of New York, Barcelona
m-CRESOL—1 keg, H A Gogarty, Liverpool
2 dms, H A Gogarty, Liverpool
CRESYLIC ACID—128 dms, H A Gogarty, Avonmouth
1 keg, Karr Ellis Co, Manchester
74 dms, H A Gogarty, Liverpool
CUTTLEFISH BONE—25 cs, Sultana Ltd, Kobe
150 cs, American Cuttlefish & Crucible Co, Kobe
100 cs, Lisbon
63 cs, Bordeaux
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
DEXTROSE—2 dms, C R Tratcher, Rotterdam
a-DICHLOROHYDRIN—1 can, Bios Laboratories Inc, Rotterdam
p-DIISOPROPYL BENZENE—1 cs, Shell Developing Co, Rotterdam
DINITROCHLOROBENZENE NE—1 cs, Amersped Inc, Hamburg
EARTH COLORS—1,800 bgs, Naftone Inc, Bremen
FERRO-COLUMBIUM—20 dms, London
FERRO-MANGANESE—65 dms, D C Andrews, Yokohama
FISHLIVER OIL—23 dms, J D Smith, Yokohama
10 dms, Arista Oil Products Co, Yokohama
5 dms, Interocean Chemical & Minerals Corp, Yokohama
5 dms, Albumina Supply Co, Yokohama
FULLERS EARTH—100 pks, L A Salomon, Avonmouth
GELATIN—100 bbls, Coignet Chemical Co, Antwerp
100 bgs, T M Duche, Antwerp
GELATIN POWDER—134 bbls, Riches Nelson, Antwerp
GINGER—86 bgs, Kellys America Ltd, London
GLUE—270 dms, Corbett & Co, Genoa
340 bgs, Jung Forwarding Co, Liverpool
180 bgs, T M Duche, Genoa
5 dms, Corbett & Co, Marseilles
39 cs, Corbett & Co, Marseilles
STOCK—20 cs, Antwerp
GRAPHITE—1,545 bgs, Asbury Graphite Mills, Colombo
250 bgs, Joseph Dixon Crucible Co, Colombo
1,556 bgs, Asbury Graphite Mills, Bergen
GUAR GUM—1,358 bgs, Swiss Bank Corp, Karachi
GYPSUM, CRUDE—11,717 tons, United States Gypsum Co, Hantsport
IODINE, CRUDE—334 dms, Calabrian Co, Yokohama
JELUTONG GUM—54 cs, Borneo Sumatra Trading Co, Surabaya
1,377 ctns, L A Dreyfus Co, Singapore
60 cs, Chicle Development Co, Kuching
20 cs, Chicle Development Co, Bintulu
KAOLIN—63 dms, E Fougera, London
KARAYA GUM—123 bgs, Block Drug Co, Bombay
134 bgs, S B Penick, Bombay
200 bgs, Stein Hall & Co, Bombay
123 bgs, Colony Import & Export Corp, Bombay
KAURI GUM—139 bgs, S Winterbourne, Auckland
LEMONGRASS OIL—39 dms, Volkart Bros, Cochin
6 dms, Fritzsche Bros, Cochin
6 dms, Ludwig Mueller, Cochin
12 dms, Lo Curto & Funk, Cochin
LICORICE ROOT—33 bgs, S B Penick, Beirut
LIGNITE—50 dms, Koppers Co Piraeus
LIME OIL—9 dms, Fritzsche Bros, Port au Prince
6 dms, Lo Curto & Funk, Vera Cruz
3 dms, Fritzsche Bros, Vera Cruz
1 dm, W F Manneke, Vera Cruz
3 dms, George Lueders, Vera Cruz
5 dms, Ungerer & Co, Vera Cruz
LITHARGE—404 dms, Eagle Picher Co, Tampico
LITHIUM CARBONATE—227 bbls, Lo Curto & Funk, Santos
LIVERMEAL—363 bgs, H S C Trading Co, Montevideo
490 bgs, Rotterdam
LOCUST BEAN GUM—55 csks, Hamburg
MACE—18 cs, K H Landes & E Balint, Singapore
16 cs, Singapore
MAGNESITE—8 cs, F L Smith & Co, Piraeus
MAGNESIUM FLUORIDE—1 cs, Interstate Universal Inc, Bremen
MAGNESIUM TRISILICATE—50 cs, Reheis Co, Liverpool
MALONIC ACID—1 dm, Interstate Universal Inc, Bremen
MENTHOL CRYSTALS—65 cs, Paul A Dunkel, Santos
25 cs, Santos
MERCURY—22 flasks, L H Keller, Tampico
MOLASSES—477 tons, W R Grace, Salaverry
MONTAN WAX—293 bgs, Hermann Hell & Co, Rotterdam
NAPHTHA—1 cnt, M W Kellog, Genoa
NAPHTHALENE—7,018 bgs, Standard Naphthalene Products Co, Grynia
500 bgs, Hudson Shipping Co, Antwerp
1,760 bgs, Standard Naphthalene Products Co, Kotka
NUTMEG—112 bgs, George Lueders Inc, Colombo
10 cs, Schoenfeld & Sons, Colombo
401 bgs, Rotterdam
OLIVE OIL—53 dms, Olive Groves Inc, Haifa
76 dms, Bankers Trust Co, Marseilles
50 dms, First National City Bank, Seville
158 dms, Maryland Pompeian Olive Oil Corp, Buenos Aires
152 dms, Albarosa Co, Buenos Aires
100 dms, Smith-Weiham Co, Piraeus
ORANGE OIL—11 cs, Herbert Marmorek, Haifa
OX GALL, CONCENTRATED—2 dms, Gelder Fanto Corp, Antwerp
PAPAIN—23 cs, American Fermant Co, Colombo
160 h ch, American Fermant Co, Colombo
50 cs, Bemo Shipping Co, Colombo
9 cs, Bemo Shipping Co, Dar Es Salam
20 cs, Dar Es Salam
PAPAYA LEAVES—100 bgs, Meer Corp, Colombo
PATCHOULI OIL—5 cs, Noville Essential Oil Co, Singapore
1 dm, J D Walsh, Singapore
5 cs, Schimel & Co, Singapore
PEATMOSS—1,750 bls, Springfield National Bank, Bremen
500 bls, S Davis, Bremen
3,003 bls, Premier Peatmoss Corp, Bremen
3,000 bls, Ezl Dunwoody, Bremen
3,000 bls, E J Lang, Bremen
2,000 bls, Premier Peatmoss Corp, Gdynia
600 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
5,600 bls, J E Bernard, Bremen
2,650 bls, J E Bernard, Hamburg
100 bdls, J E Bernard, Hamburg
75 blocks, J E Bernard, Hamburg
1,000 bls, Ascot Peatmoss Corp, Bremen
1,000 bls, Marine Midland Trust Co, Bremen
500 bls, Bremen
PENICILLIN—1 cs, Marklin Chemical Corp, Bangkok
PEPPER, BLACK—560 bgs, Ludwig Mueller, Cochin
320 bgs, Virchand Panachard, Cochin
350 bgs, C Czarinkow, Singapore
380 bgs, C M Van Sillevoldt, Singapore
560 bgs, Internatio Rotterdam, Kuching
210 bgs, J F Frank, Singapore
480 bgs, Borneo Sumatra Trading Co, Tandjong Priok
460 bgs, Borneo Sumatra Trading Corp, Singapore
280 bgs, Ludwig Mueller, Singapore
140 bgs, Atlantic Textile Corp, Singapore
140 bgs, R J Spitz, Singapore
70 bgs, Becker Mayer Seed Co, Singapore
210 bgs, Mutual Spice Co, Singapore
140 bgs, California Commodity Corp, Singapore
914 bgs, A G Dunn, Singapore
80 bgs, A G Dunn, Colombo
210 bgs, Internatio Rotterdam, Singapore
240 bgs, A G Dunn, Cochin
80 bgs, Guaranty Trust Co, Cochin
1,050 bgs, Singapore
PEPPER, RED—48 bgs, M Golodetz, Cochin
80 bgs, Polak Trading Co, Cochin
64 bgs, Mincing Trading Co, Cochin
80 bgs, Ludwig Mueller, Cochin
PEPPERMINT LEAVES—66 bxs, Meer Corp, Hamburg
PETROLEUM, CRUDE—108,819 bbls, Shell Caribbean Petroleum Co, Bachaquero
577,114 bbls, Esso Standard Oil Co, Puerto La Cruz
111,547 bbls, Esso Standard Oil Co, La Salina
120,000 bbls, Socony Mobil Oil Co, Puerto La Cruz
110,244 bbls, British American Oil Co, Las Piedras
101,305 bbls, Hess Inc, Bajo Grande
102,431 bbls, Hess Inc, Maracaibo
PINENEEDLE OIL—1 dm, Pine Import Co, Hamburg
POLLACKLIVER OIL—230 dms, Arista Oil Products Co, Yokohama
2 dms, Interocean Chemicals & Minerals Corp, Yokohama
POLYVINYL ACETATE—440 ctns, G G Lippelgoes
POLYVINYL CHLORIDE—4 cs, Haas Bros, Antwerp
POPPY SEED—200 bgs, Levy & Lewis Co, Rotterdam
100 bgs, Joel Bieler Exports & Import, Rotterdam
POTASSIUM BROMATE—1 cs, Pfaltz & Bauer Inc, Bremen
POTASSIUM FERROCYANIDE—20 kegs, Schmidt, Pritchard, Antwerp
POTASSIUM GUAIACOLSULFONATE—22 csks, Havre
PYRETHRUM FLOWERS—86 bdls, P H Petry Co, Puna
QUEBRACHOWOOD EXTRACT—6 bgs, First National Bank of Boston, Buenos Aires
5 bgs, American Tanners Ltd, Buenos Aires
QUINIDINE SULFATE—18 dms, Hamburg
RADIUM ELEMENT—2 cs, Radium Chemical Co, Antwerp
RAPESEED—100 bgs, Vaughans Seed Co, Rotterdam
RICE STARCH—100 bgs, Rotterdam
ROCK SALT—2,500 tons, Bulk Carrier Corp, Barahona
SAGO FLOUR—220 bgs, Richard Lennard, Singapore
SALICYLIC ACID—100 dms, Alltransport Inc, Hamburg
5 kegs, London
SANDARAC GUM—7 cs, Dumont Shipping Co, Genoa
SAPONIN POWDER—20 dms, Karr Ellis, Liverpool
SASSAFRASS OIL—67 dms, Wm H Mueller, Amsterdam
SEEDLAC—250 bgs, C H Timm, Bangkok
500 bgs, Chase Manhattan Bank, Bangkok
1,500 bgs, Wah Chang Corp, Bangkok
250 bgs, Mac Lac Co, Bangkok
250 bgs, Irving Trust Co, Bangkok
500 bgs, Haeuser Shellac Co, Bangkok
500 bgs, Kane Import Co, Bangkok
500 bgs, Gillespie Rogers Pyatt, Bangkok
500 bgs, East Asiatic Co, Bangkok
250 bgs, Bankers Trust Co, Bangkok
250 bgs, Bangkok
SERPENTINA ROOT—205 bgs, Meer Corp, Bangkok
SHELLAC—27 dms, F H Paul & Stein Bros, Rotterdam
40 bgs, F H Paul & Stein Bros, Rotterdam
SILICON—14 cs, Globe Shipping Co, Havre
SODIUM ARSENATE—58 dms, Orlex Dyes & Chemical Corp, Marseilles
SODIUM CYANIDE—280 dms, American Cyanamid Co, Liverpool
250 dms, Chemical Manufacturing Co, Liverpool
SODIUM GLYCEROPHOSPHATE—10 dms, R J Saundery, Southampton
SODIUM SILICOFLUORIDE—5 bgs, Riches Nelson, Rotterdam
SOLELIVER OIL—20 dms, Consumers Import Co, Yokohama
SULFUR, CRUDE—1,707 tons, E I Du Pont de Nemours, Coatzacoalcos
TALC—921 bgs, C B Crystal, Bordeaux
625 bgs, L A Salmon, Bordeaux
5,250 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—3,000 bgs, Bank of China, Keelung
1,947 bgs, H F R Dolan, Bangkok
TARTARIC ACID—255 ctns, Nylos Trading Co, Genoa
117 dms, London
TRAGACANTH GUM—50 bgs, Rotterdam
TRICHLOROACETIC ACID—10 dms, Express Forwarding & Storage Co, Bremen
ULTRAMARINE BLUE—100 bgs, Whittaker, Clark & Daniels Inc, Hull
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Liverpool
WHITING—720 bgs, Hammill & Gillespie Inc, Hull
600 bgs, Smith Chemical & Color Co, Hull
ZINC CHLORIDE—60 dms, Riches Nelson Inc, Rotterdam
23 dms, Antwerp
ZINC PHOSPHIDE—10 dms, Hudson Shipping Co, Genoa

Los Angeles

AMMONIA—200 dms, Western Chemicals & Manufacturing Co, Liverpool
AMMONIUM CHLORIDE—400 bgs, C M C Chemicals Inc, Liverpool
CASTOR OIL—672,000 lbs, Baker Castor Oil Co, Bombay
COPAL GUM—65 bkts, D Kecht & Co, Tandjong Priok
67 bkts, O G Innes Corp, Tandjong Priok
CHLORINATED RUBBER—200 bgs, C M C Chemicals, Inc, Liverpool
COPRA—2,000 bgs, Balfour, Guthrie & Co, Cebu
8,960 bgs, Cargill Inc, Manila
2,240 bgs, Balfour, Guthrie & Co, Manila
2,240 bgs, Pacific Vegetable Oil Corp, Manila
COPRA CAKE—6,720 bgs, Cargill Inc, Zamboanga
EARTH COLORS—1,125 bgs, Castelazo & Assoc, Bremen
450 bgs, American Chemical & Pigments Corp, Bremen
FORMIC ACID—19 dms, L H Butcher Co, Antwerp
KARAYA GUM—126 bgs, Hathaway Allied Products, Bombay
KELPMEAL—200 bgs, Security First National Bank of L A, Oslo
LIVER OIL—50 dms, Universal Foreign Service, Yokohama
MOLASSES—10,049 tons, National Molasses Co, Manzanillo
OLIVE OIL—50 dms, Raymond de M Azria, Genoa
PEATMOSS—250 bls, Atkins, Kroll & Co, Hamburg
400 bls, N V Nootbaar & Co, Hamburg
100 bls, East Asiatic Co, Rotterdam
PETROLEUM, CRUDE—264,842 bbls, Union Oil Co, Mena al Ahmadi
7,488,810 gal, Union Oil Co, Puerto La Cruz
SEAWEED MEAL—200 bgs, J L Ohman, Bergen
SEEDLAC DUST—134 bgs, East Asiatic Co, Bangkok
SEEDLAC SLEVING—200 bgs, P N Rowe, Bangkok
SIENNA—200 bgs, F D Davis Co, Genoa
SODIUM BICARBONATE——1,200 bgs, C M C Chemicals Inc, Liverpool
SODIUM CYANIDE—500 dms, C M C Chemicals Inc, Liverpool
TAPIOCA PEARLS—35 bgs, H M Newhall & Co, Tandjong Priok
TRICHLOROETHYLENE—450 dms, C M C Chemicals Inc, Liverpool
UREA, SYNTHETIC—800 bgs, C M C Chemical Inc, Liverpool
1,380 bgs, C M C Chemical Inc, Middlesbrough
ZINC SULFATE HEPTAHYDRATE—500 bgs, Montanore Inc, Antwerp

Philadelphia

FLUORSPAR—3,712 tons, Tampico
BALL CLAY—892,232 lbs, Avonmouth
3,200 bgs, Avonmouth
BLANC FIXE—100 bgs, Wagman Co, Rotterdam
BONE—6,914 bgs, Kind & Knox Co, Calcutta
5,921 bgs, Ralli Bros, Calcutta
6,793 bgs, Baugh & Sons, Rosario
1,568,000 lbs, Rosario
CHALK—1,600 bgs, Pluss Stauffer, Antwerp
CRESYLIC ACID—275 dms, Concord Chemical Co, Rotterdam
DICALCIUM PHOSPHATE—881 bgs, Woodward Dickerson, Antwerp
FUEL OIL—104,243 bbls, Paragon Oil Co, Tampico
GLYCERINE, CRUDE—346 dms, Alexandria
GLYCERINE, SOAPLYE—99 tons, Rotterdam
GYPSUM, CRUDE—11,482 tons, National Gypsum Co, Halifax
6,306 tons, United States Gypsum Co, Hantsport
11,574 tons, National Gypsum Corp, Halifax
MAGNESITE—200 tons, Sibenik
MANGANESE ORE—5,000 tons, African Manganese Co, Takoradi
3,000 tons, Lobito
MOLASSES—2,902,804 gals, Publicker Co, Pastelillo
1,598,648 gals, Cienfuegos
381,358 gals, Jucaro
NAPHTHALENE—2,143 bgs, Barrett Division, Rotterdam
250 bgs, Hamburg
1,933 bgs, Rotterdam
PETROLEUM, CRUDE—174,116 bbls, Gulf Oil Corp, Puerto La Cruz
1,536,557 bbls, Gulf Oil Corp, Mena al Ahmadi
110,434 bbls, Atlantic Refining Co, Puerto La Cruz
104,329 bbls, Atlantic Refining Co, La Salina
128,626 bbls, B P Trading Co, El Cardon
115,908 bbls, Texas Oil Co, Pamatacual
158,080 bbls, Texas Oil Co, Punta Cardon
115,675 bbls, Texas Oil Co, Brighton
118,036 bbls, Texas Oil Co, Mamonal
111,897 bbls, Socony Mobil Oil Co, Mena al Ahmadi
239,237 bbls, Socony Mobil Oil Co, Covenas
QUEBRACHO EXTRACT—1,306 bgs, Tan American Corp, Buenos Aires
TAPIOCA FLOUR—400 bgs, Stein, Hall & Co, Itajai
3,437 bgs, American Melagraph Co, Itajai

TGA on New Cosmetics Bill: Okay, But—

—Continued from page 3

which the Secretary of Health, Education and Welfare has listed in the **Federal Register** as safe.

A new cosmetic is defined as a cosmetic containing a new cosmetic ingredient. The term "safe for use" as used in the proposal is limited to use "under conditions of its intended use" and not 'absolutely safe" under all conditions.

The bill would permit any person to file an application for approval of a new cosmetic ingredient. The application would have to contain reports of investigations, including references to the scientific literature, designed to show whether or not such ingredient was safe, a full statement of the composition of the ingredient, a full description of the control methods for quality and uniformity, a statement as to proposed use of the ingredient, and such samples as the secretary might require.

Secretary Has Sixty Days to Act

Within sixty days after filing an application (unless the Secretary found that he needed an additional sixty days), the secretary would have to make public a regulation either exempting the new ingredient from the necessity for limitation of its use, or, where necessary to protect the public health, establishing restrictive use based on the use of the cosmetic in which the ingredient would appear, or the area of application of such cosmetic.

Such regulation could also establish quantitative limitations with respect to the percentage of the ingredient which could be used in a cosmetic. In other words, the secretary would limit new ingredients to a particular type of cosmetic use or state maximum percentages in which they could be used in any particular type of cosmetic. Any person who had reason to object to such a regulation would have thirty days to file an objection with the secretary and request a hearing.

The secretary, after an application had become effective, if he received additional information to show that the new ingredient was unsafe or that the application contained an untrue statement of a material fact, might suspend the application. In all these cases, the applicant would have to receive due notice and would have to be given an opportunity for a hearing.

The bill further provides that nothing in it shall imply consideration by the secretary of the efficacy of either a new ingredient or a new cosmetic. Proposals for appeal are also included in the bill, based on preponderance of evidence and not substantial evidence.

A special section would change the present proposal for the certification of colors so that the doctrine of "harmlessness per se" would be eliminated and the secretary would be given authority to establish tolerances. He would further be given authority to exempt any color from c rtification provisions if such certification were not necessary to protect the public health.

Celanese Earnings Down— New Facilities Cost Money

Celanese Corporation of America, New York, showed a decrease in its earnings for the first half of this year, but the reason for it was largely the high cost of bringing in new production facilities.

In making the semi-annual report, President Harold Blancke said that profits were affected during the six-months period by high costs incurred in bringing into production the company's new low pressure polyethylene plastics plant near Houston, Tex., as well as certain chemical product facilities. Another factor, he said, was the cost of introducing these new products to the market.

The first half earnings amounted to 56 cents a share on the common stock compared with last year's first half earnings of 65 cents a share.

MEDICINAL CHEMICALS

Aminophylline, U.S.P.
•
Benzil
•
Benzilic Acid
•
Benzoin
•
Betaine Hydrochloride
•
Calcium Glutamate
•
Copper-Dichlor-Quinolinol
•
Dilodohydroxyquin, U.S.P.
•
Diphenylacetic Acid
•
Glutamic Acid and HCl
•
Hydroxy Dimethyl Pyrimidine
•
Iodochlorohydroxyquin, U.S.P.
•
Paba, N.F.
•
Paba Potassium
•
Paba Sodium
•
Phthalylsulfacetamide
•
Piperazine Salts
(Adipate, Citrate, Dihydrochloride, Phosphate and Tartrate)
•
Procaine Hydrochloride, U.S.P.
•
Quinolinol (Oxyquinoline) Salts and Derivatives
•
Rutin, N.F.
•
Sodium Propionate, N.F.
•
Succinic Acid Salts and Derivatives
•
Sulfacetamide, U.S.P.
•
Terpin Hydrate, N.F.
•
Write for our new 32 page Products Catalog

B. L. LEMKE & CO., INC.
LODI, NEW JERSEY

WALTER C. GREGORY CORPORATION
480 HENDERSON STREET, JERSEY CITY, NEW JERSEY • SWarthmore 5-1010-1011
CUSTOM Grinding - Spray Drying - Mixing - Blending - Cleaning - **Roasting** - of Gums - Roots - Spices - Drugs - Pharmaceuticals
NICHOLS ENGINEERING & RESEARCH CORP. 70 PINE STREET, NEW YORK 5, N. Y.

P&B
BERYLLIUM • LANTHANUM • CERIUM
THORIUM and ZIRCONIUM SALTS • AMMONIUM BIFLUORIDE
TITANIUM POTASSIUM OXALATE
ABSORPTION BASE • CHLOROPHYLL • LANOLINE, U.S.P. • SAPONINS
BIOLOGICAL STAINS • ph BUFFER SOLUTIONS
"FIXANAL" CONCENTRATED PREPARATIONS FOR NORMAL SOLUTIONS
MOLDOL (Preservative)
SINCE 1900
Pfaltz & Bauer, Inc.
EMPIRE STATE BUILDING, NEW YORK

GUMS
ARABIC • GUAR
GHATTI
KARAYA (Indian)
LOCUST (Carob Flour)
TRAGACANTH

REPRESENTATIVES:
CHICAGO: CLARENCE MORGAN, INC.
BOSTON: P. A. HOUGHTON, INC.
PHILADELPHIA: HARRY W. GAFFNEY
LOS ANGELES: C. H. OWINGS
ST. LOUIS: VICTOR ROBERSON CO.

EST. 1914

MENTHOL (NATURAL CRYSTALS)
•
EGG ALBUMEN
•
BLOOD ALBUMEN

CASEIN
•
JAPAN WAX
•
QUINCE SEED

PAUL A. DUNKEL & CO., INC.
IMPORTERS AND EXPORTERS
26 JOURNAL SQ., JERSEY CITY 6, N. J.
TEL: OLDFIELD 6-6400. N. Y.: WORTH 4-3341
CHICAGO: 320 W. OHIO ST. TEL: SU. 7-2462

VITAMIN D-2 and D-3
Calciferol
Crystalline D_3 Crystalline D_3 Compound
Oil & Water Miscible (Mineral) Stable Powders
Dihydrotachysterol

PURE VEGETABLE EXTRACT COLORS
YELLOW — RED — ORANGE

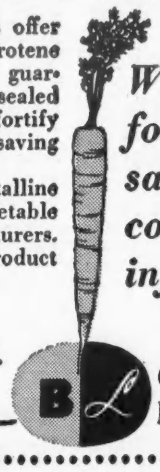
BOWMAN YEAST PRODUCTS
Primary (Torulopsis utilis) Brewers' (Sacchromyces cerevisiae)
Powders — Flakes — Extracts — Concentrates — Hydrolysates
Vitab® B-Complex Extract

CHLOROPHYLL CAROTENE
PHYTOL XANTHOPHYLL
VIANOL®
Anti-Oxidant (BHT)

CHARLES BOWMAN & COMPANY
220 East 42nd Street, New York 17, N. Y.
600 South Michigan Avenue, Chicago 5, Ill.
130 Central Avenue, Holland, Mich.
170 East California Street, Pasadena 1, Calif.

MARGARINE &
SHORTENING PROCESSORS
PLEASE NOTE!

MARGARINE: Barnett Laboratories offer vitamin A and Microcrystalline Carotene blended to your specifications, fully guaranteed and shipped in hermetically sealed containers. Now you can color and fortify each batch in one convenient, time-saving operation.
SHORTENING: Barnett's Microcrystalline Carotene in Oil is a *non-toxic* vegetable "coloring" used by leading manufacturers. It blends easily with a shortening product and imparts a golden, yellow hue.



Write Today for prices, samples and complete information

BARNETT INC.
Laboratories
6256 Cherry Ave.
Long Beach 5, Calif.

HORMONES
DEHYDROCHOLIC ACID, N.F.
(Oral and Injectable Grades)
OX BILE USP
DRIED OX GALL POWDER
We invite your inquiries
GEDEON RICHTER
PHARMACEUTICAL PRODUCTS INC.
20 Exchange Place, New York 5, N.Y.

for Natural Yellow and Vitamin A use
CAROTENE
Consider GBI Carotene for your product. Reasonable cost—Several forms. Write for free copy Bulletin #16—"Carotene Story".
"Pioneers in CAROTENE for Over 20 Years"
GENERAL BIOCHEMICALS, INC.
53 Laboratory Park Chagrin Falls, Ohio

Mono
Oleates
Di

of
Diglycol
Ethylene Glycol
Diethylene Glycol
Polyethylene Glycol
Propylene Glycol
Polyoxyethylene
Butoxyethyl
Glycerine

MADE TO MEET YOUR SPECIFICATIONS

THE FLAME AND THE FLASK—SYMBOL OF QUALITY

WRITE FOR SAMPLES, DATA, ETC.

The C. P. Hall Co.
CHEMICAL MANUFACTURERS
5147 W. 67th Street, Chicago 38, Illinois
AKRON, OHIO • NEWARK, N. J. • CHICAGO, ILL. • LOS ANGELES, CAL.

Piperazine from Carbide Is Marketed in New Form

Piperazine, an intermediate used widely in the production of tranquilizing drugs and deworming agents, is now commercially available as a free flowing, anhydrous,, crystalline form from the fine chemicals division of Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation.

Ease of handling and an exceptionally high purity of 98 percent are the principal advantages of this flake form, according to Carbide. Piperazine flake increases the number of Carbide's piperazine chemicals to six.

Sitosterol Is Commercially Available from General Mills

Sitosterol, a steroid starting material for hormone synthesis, is now available in commercial quantities from General Mills chemical division in Kankakee, Ill.

Some suggested uses of sitosterol are indicated as synthesis of adrenal cortical hormones, sex hormones, hormonal drugs, and anti-cholesterol drugs. Other uses of sitosterols might include ointments, insecticides, lotions, cosmetics, pharmaceuticals and veterinary medicine, according to General Mills.

Labeling of Household

—Continued from page 5

dustry followed a labeling program that seemed adequate at the time. Today, however, Mr. Williams said, there appears to be a need for supplementing the chemical industry's voluntary program by enacting new labeling legislation.

The congressman's statement continued:—

"I believe that nationwide uniformity in the labeling of chemicals which can be hazardous would be advantageous to everybody. Such a labeling program would facilitate the education of the public in general. Informative, uniform labels would enable physicians to administer antidotes immediately, rather than waste precious time in determining the active ingredients of products. And, an enlightened labeling program would help to familiarize adults as well as children with the cautions which need to be observed in order to prevent the totally unnecessary and deplorable accidents which are reported so graphically in the public press from time to time.

Legislation Seen Aiding States

"In addition to other benefits to be derived from Federal legislation dealing with this subject, it is likely that its enactment would help toward the establishment of uniform, adequate, modern labeling requirements by the various states. Such uniformity now exists to a certain degree in some States which have labeling laws and regulations. Among these are California, Connecticut, Illinois, New Jersey, New York, Oregon, Texas, and the Territory of Hawaii.

"A few additional states have enacted enabling legislation but have not as yet issued regulations to supplement their statutes. There is a possibility that diverse labeling regulations will be enacted by the states, leading to a multiplicity of requirements and creating unnecessary confusion in labeling, to the detriment of the public.

"The bill I have introduced has been drafted in such a manner as to avoid requirements for overlabeling which serves no useful purpose. It provides for a reasonable gradation of descriptive words and phrases for adequately conveying the directions for proper handling and use, without exaggerations which could becloud the warning message on the label.

To Provide Guidance

"Indications are that most manufacturers of household chemical products are fully aware of the hazards inherent in the chemicals they make and sell. There are, however, some manufacturers and processors who do not have the resources to develop and maintain adequate labeling programs on their own. The legislation I am introducing would, I believe remedy this situation by prescribing a program which could provide reasonable, safe guidance for all.

"It is heartening to note that a number of chemical firms and professional organizations would welcome the prospect of federal legislation in this relatively neglected field. The American Conference of Governmental Industrial Hygienists approved the principle of label uniformity at its 1952 meeting. The International Association of Governmental Labor Officials has proposed a set of model labeling requirements. It is my understanding that the Manufacturing Chemists' Association, a private organization which represents many of our leading chemical companies, has been working for years to establish fundamental concepts for adequate, safe labeling procedures and to encourage their use. The Chemical Specialties Manufacturers' Association has also done constructive work in this field. Also, I understand that the American Medical Association is interested in this subject."

Cyclic Intermediates

—Continued from page 7

pounds in 1956, or 25 percent more than the 389 million pounds reported in 1955. Other large-volume intermediates, the output of which was substantially larger in 1956 than in 1955, were cresylic acid (an increase of 23 percent), cresols (an increase of 15 percent), phenol (an increase of 6 percent) and monochlorobenzene (an increase of 4 percent).

Production of many important intermediates, on the other hand, was smaller in 1956 than in 1955. The output of refined naphthalene declined 14 percent, that of aniline and nitrobenzene, 7 percent each, and that of phthalic anhydride, 5 percent.

NOW OVER 5100
BIOS CHEMICALS

- BISTRYCHNIDYL
- BIXIN
- BOLDINE
- BOROCAIN
- BOROMOLYBDIC ACID
- BORON TRICHLORIDE
- BORON TRIPHENYL
- BOROTUNGSTIC ACID
- BRASSIDIC ACID
- BROMELIN
- p-BROMOBENZYL BROMIDE
- p-BROMOBENZYL CYANIDE
- 4-BROMOIMIDAZOL
- 4-BROMOPYRIDINE
- 5-BROMOSALICYLALDEHYDE
- 8-BROMOTHEOPHYLLIN
- 8-BROMOXANTHINE
- BULBOCAPNINE
- BUTYL OLEATE
- BUTYL THIOCHOLINE

Ask for our new complete catalogue.

BIOS Laboratories, Inc.
17 West 60th St. New York 23, N. Y.
PLaza 7-8171

Penn-Drake®
WHITE OILS and Petrolatums
REGULAR GRADES OR WITH "Custom Specs"
ALL OF HIGHEST QUALITY
penn drake
PENNSYLVANIA REFINING COMPANY
BUTLER, PENNSYLVANIA
Branches: Cleveland, Ohio and Edgewater, N. J.
Representatives in all Principal Cities

Petroleum Derivatives

Major toluene producers have cut prices 2 cents to 3.25 cents per gallon depending upon shipping point. Corresponding export prices were being discussed last week. These price reductions follow an attempt by one major producer a short time ago to hike toluene prices. The market for this aromatic has been oversaturated during recent months. Stocks have been high, while demand has tapered off. Xylene also saw a price cut by one major producer at some points. A 1 cent reduction brought the quote in that quarter to 34 cents per gallon. It was still being rumored that other producers had cut prices also. Benzene production in the U.S. has increased, market sources noted, with demand for this aromatic expected to pick up in future months. Trading in all the aromatics was reported as moderate last week.

Buying interest in both lacquer diluent and VM&P naptha has been well sustained throughout the summer season. While the former has been effected slightly by slow-ups in production of hard goods needing lacquer type finishes, it was expected to move in good quantity to this outlet in coming months. A price change in lacquer diluent was mentioned by some producers. However, it was not expected in the immediate future.

Petrolatum producers have no complaints. Demand for this material continued high from many and diversified outlets. Current price structure was not expected to change.

In the wax field, no producer talked a slack market. Business volume has been steadily rising with October and November expected to be record months. Increased paraffin sales are attributed to the continued demand by the dairies for milk cartons. Sales in the laminating grades of microcrystalline were seasonally off but the coating grades continued to sell. Reportedly, there will be an increased demand in future months for the super grades.

Price Trends

Advanced

None

Reduced

Toluene, petroleum, 2c. to 3.25c. per gal.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
107.05	107.78	107.64	105.47

For Current Prices See Page 9

Solvents and Diluents

Benzene—Market sources said that domestic benzene production has been stepped up. As a result, imports of this aromatic are expected to decline in future months. With business seasonally off, producers last week preferred to discuss the Fall market when business volume in benzene will be more substantial. Currently quoted at 36c. per gallon, benzene prices are not expected to change in the immediate future.

Lacquer Diluent—The general tone of the market was unchanged. Supplies were adequate, demand steady. Business was slightly off due to curtailed production of hard goods needing lacquer type finishes. Producers expected prices to remain the same.

Toluene—Cumulative competitive pressures which have been building up in this soft market for a long time, resulted in a break of 3c. per gallon at most shipping points last week. This applies to petroleum source material. The weakness has been due to overproduction of toluol nationwide, with real disposal problems apparent in many quarters. Solvent usage has been substantial but not sufficient to take up the slack.

Heavy government usage for TNT has dwindled to a trickle. The movement of heavy volumes into export at considerably reduced prices, and the fact that petroleum producers could let it run into aviation gasoline is all that kept the market from breaking months ago. The value of toluene in gasoline for the new high octane gasoline fuels for cars was generally such that prices were considerably under the solvent level price. Just how much more toluol, as a solvent or chemical intermediate, the new price structure will move, was a matter of conjecture. However, it at least should have a stabilizing influence on negotiated selling.

VM&P Naphtha—This solvent continued to move in sufficiently large quantities to keep the market very stable. In tank cars on the east coast, VM&P sold at 19c. per gallon, the prevailing price in recent months. Producers last week were not contemplating any changes in prices.

Xylene—Effective last week, xylene was quoted at Wood River at 34c. per gallon, a 1c. drop from the previously listed price. No other price changes were reported.

While the xylene market has been relatively good this summer, it has been somewhat sloppy, but not alarmingly so, producers added.

LPG's

According to the American Petroleum Institute, production of liquefied petroleum gas for the period July 1-15 reached 234,981,000 gallons, compared with the 242,808,000 gallons produced in the preceding two weeks.

At the same time, API reported that production of liquefied refinery gas for the first fifteen days in July amounted to 93,550,000 gallons, about one million gallons below the June 16-30 figure.

Butane—Output of liquefied petroleum gas during the July 1-15 period amounted to 49,939,000 gallons, as compared with the 50,757,000 gallons produced in the period June 16-30.

Liquefied refinery butane production decreased from 27,284,000 gallons of the June 16-30 period to 24,964,000 gallons in the first two weeks in July.

Isobutane—The API reported that production of this material reached 17,082,000 gallons during the two week period ending July 15. The June 16-30 figure was 16,424,000 gallons.

Propane—During the July 1-15 period, production of this light pressed gas reached 107,716,000 gallons. For June 16-30, API announced a production figure of 111,685,000 gallons.

At the same time, liquefied refinery propane production amounted to 44,896,000 gallons, an increase of approximately 2 million gallons over the previous two week period.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended July 26, 1957, indicate a decrease in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,922,000 barrels, a decrease of 25,000 barrels from the preceding week. Daily average crude runs to stills of 7,763,000 barrels were 14,000 barrels above the preceding week, and 227,000 barrels below the week ended July 27, 1956. Runs of foreign crude amounted to 1,139,000 barrels daily, compared with 1,286,000 barrels in the preceding week. For the four-week period ending July 26, crude oil production averaged 6,926,000 barrels daily, and crude runs to stills averaged 7,831,000 barrels daily with runs of foreign crude averaging 1,193,000 barrels daily.

Petrolatum—The summer season has had no adverse effects on the petrolatum market. Demand has been high and is expected to continue so, producers said last week. The widely diversified uses for this material have kept sales high. Market sources predicted no immediate shift in prices.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended July 27 totaled 285,241,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 285,882,000 barrels for the preceding week, this represents a decrease of 641,000 barrels, comprising a decrease of 254,000 barrels in stocks of domestic crude and a decrease of 387,000 barrels in stocks of foreign crude.

AMOCO CHEMICALS—A NEW RESOURCE

Amoco Chemicals

PETROLEUM SULFONATES

A series of high molecular weight sulfonates for nondetergent uses, such as, emulsifying agents for soluble and textile oils, rust preventives, etc.

Typical Inspection Data	Grades AA	AA Purified	B	B Purified
% Soap	52	51	45	51
% Oil	25	46	30	45
Mol. Wt.	430	430	490	490

Available in drums and tank cars F.O.B. Whiting, Indiana. Samples, prices and additional information available on request.

AMOCO CHEMICALS

AMOCO CHEMICALS CORPORATION
910 South Michigan Avenue, Chicago 80, Illinois

PERSONALLY YOURS . . .

If this is the office copy of OPD, why not try the convenience of your own? Yours to see promptly each week — as personal as your favorite daily paper. Either this coupon or a letter will get you started—a good investment for the important months ahead.

( ) Send bill for one year (52 issues) $5* ( ) Check enclosed

PLEASE PRINT OR TYPE

Individual.....

Street address..... please check ( ) business ( ) home

City, Zone and State .....

Company connection .....

Firm's products and type of business .....

Your position or work.....

*This rate applies only in the United States. Other countries—Canada $7; Foreign $10, remittance with order, in U.S. funds.

Oil, Paint and Drug Reporter, 30 Church St., New York 7, N. Y.

MAGNA CITRUS OILS

SWEET ORANGE LEMON LIME

GRAPEFRUIT TANGERINE

Since 1895

Unexcelled for Quality, Flavor and Bouquet

MAGNUS, MABEE & REYNARD, INC.

16 DESBROSSES STREET, NEW YORK 13, N. Y.

The World's Most Famous Supplier of Essential Oils, Basic Perfume Oils and Concentrated Flavors

OIL of PEPPERMINT SPEARMINT

Of the Choicest Quality

☆

A. M. TODD COMPANY

KALAMAZOO, MICHIGAN

Florasynth

AEROSOL BOUQUETS & MASKING ODORS for INDUSTRIAL PURPOSES

LABORATORIES, INC.

900 VAN NEST AVE. NEW YORK 62, N.Y.

Chicago 6, Los Angeles 21 and other principal cities in the U. S., Canada and Mexico

ESSENTIAL OILS • PERFUME OILS • FLAVORS • AROMATIC CHEMICALS and ODOR MASKS

Proven Replacements For: BERGAMOT OIL, CITRONELLA OIL, ANISE OIL, CASSIA OIL

DOMESTIC EXPORT YOUR INQUIRIES SOLICITED

D. W. HUTCHINSON & CO., INC., 700 South Columbus Ave., Mount Vernon, N. Y.

Founded 1896 Telephone: Mount Vernon 4-7272

always a DEPENDABLE source of supply!

- Essential Oils
- Perfume Bases
- Aromatic Chemicals
- Flavors & Flavor Materials

FELTON

CHEMICAL COMPANY, INC.

599 Johnson Avenue, Brooklyn 37, N. Y.

Write for Samples

Atlanta
Boston
Brooklyn
Chicago
Cleveland
Los Angeles
Montreal
Philadelphia
St. Louis
Toronto
Versailles
France

FRAGRANCES for AEROSOLS

Having done tremendous research in the field of aerosol perfuming, we can assure you satisfaction whatever may be your aerosol odorizing need. Call upon us freely—with any problem, at any price, and for any odor. Our Perfume or Industrial Odorant Division will be glad to confer with you.

FRITZSCHE *Established* 1871 *Brothers, Inc.*

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES *and* *STOCKS: *Atlanta, Georgia, Boston, Massachusetts, *Chicago, Illinois, Cincinnati, Ohio, *Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, Montreal and *Toronto, Canada and *Mexico, D. F. FACTORY: Clifton, N. J.

Essential Oils, Aromatics

In the essential oil market, quiet trading due to limited demand, with most items just able to maintain present price patterns, characterized the market. However, certain items had apparently hit bottom, and underneath the present structure was a firming tone that indicated stronger market trends in the weeks ahead.

Prices on old crop peppermint oil were holding, despite the advent of new crop material some weeks hence. Spearmint oil was holding well and quoted higher in some quarters. What the pattern would be on chenopodium was uncertain, because it was not as yet determined what effect the drought would have on the new crop. Anise oil remained soft, and redistilled cajeput was easier. Nutmeg oil advanced due to factors existing in primary markets.

The market in aromatic chemicals was characterized by slow seasonal demand and quite ample supply. Business volume was said to be fair in specialty intermediates, but the standard readily available materials were quiet. Buyers tended to operate on a hand to mouth basis, depending upon prompt shipment from suppliers, and maintaining low inventories. Plant vacation shutdowns were also an important factor in the slow business period of July and August.

Seeds and spices were, overall, steady, with only fractional gains and losses here and there. The pepper market gained a firm undertone as a result of activity, in primary markets. Pepper stocks in New York were regarded as lower than normal because dealers tended to sell shipments ex dock to avoid high warehouse costs. Expectations were that the pepper market would continue to grain fractionally until buying set in, where aggressive buying would soon result in upward price adjustments.

Ginger root was off about 1 cent for various grades, but this was not regarded as serious, since present stocks have to carry over into early next year, and price trends will recover in the weeks ahead. The hot type of red peppers was reported as scarce. Others were in good supply, but imported chilles held firm because of the expected damage to the Louisiana crop by the recent hurricane.

Price Trends

Advanced

Nutmeg oil, $1.50 per lb.

Reduced

Anise oil, 25c. per lb.
Cajeput oil, redist., 10c. per lb.
Clove bud oil, 10c. per lb.
Lemon oil, Messina, 50c. per lb.
Safrol, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
146.29	144.82	144.87	138.38

For Current Prices See Page 9

Essential Oils

Anise—Current market prices were listed at $2.50 per pound, off 25 cents from the previous level of $2.75. The feeling was expressed in certain quarters that present price levels were the result of seasonal factors, more or less to be expected. Trading was quiet.

Cajeput—Redistilled oil moved at $2.10 cents per pound and up, depending upon quantity and seller, and represented a decline of some 15 cents per pound. Native was unchanged at $1.75.

Cardamom—The NF oil was priced at $43.00 last week. Trading was generally quiet, and seasonally off.

Chenopodium—Wormseed material was listed at $4.75 last week, showing a somewhat stronger tone pricewise, because of the uncertainty of supply because of the current drought. What new crop prospects will actually be could not as yet be accurately estimated.

Clove—The feeling was expressed that prices had about hit bottom in both leaf and bud oils, and that there was a somewhat firmer undertone developing in the market. As of last week bud oil prices were around $2.80 per pound, and varied upward depending upon quantity and seller. While further declines could conceivably develop, the market was expected to level off.

Ginger—Distilled ginger oil of top quality was priced at $25 per pound last week. The ginger market has been on the soft side, but with current stocks well below normal, further weakening was not expected.

Guaiacwood Oil—Trading was reported as quiet, with prices in the range of $1.73 per pound, varying as to quality, quantity, and seller.

Lemon Oil—California oil ranged from $3.25 per pound upward depending upon quality, quantity, and seller. Buying interest was currently sluggish, and supplies were quite adequate to meet all needs. Shipments were prompt, with buyers tending to operate on a hand to mouth basis. Messina was priced at $5.25, per pound.

Lavandin — Limited demand against abundant supply was felt as the primary reason for the present relatively low price pattern prevailing in the market. Prices held unchanged last week at $2.75 per pound, but whether or not this represented bottom in the soft market was a matter for conjecture.

Lemongrass—Trading in this oil was described as slow, both in the United States, and abroad. Supplies were more than ample, due in large part to the loss of lemongrass oil of a substantial part of its market where it is used to manufacture vitamin A. One very large Vitamin A producer has gone to a process involving total synthesis, in which no lemongrass oil is consumed. Considering the volume involved, lemongrass has been left in long supply worldwide. What effect this will ultimately have on prices was a matter of conjecture.

Nutmeg—Current prices were listed at $14.50 per pound, a level somewhat higher than the former $13 price which had characterized the market. Both East and West Indian were priced at the same level.

Orange Oil—There has been less lull in the orange oil business than has characterized many of the essential oils. Trading has not been heavy and producers were not operating under pressure, but the market has been steady and prices, especially in Florida material have held firm. There has been some competitive price adjusting on California, in certain quarters.

Patchouli—The market was slow with most trading being done in the range of $6 to $6.25 per pound. There was little new to report on this market, and no immediate change was felt likely.

Peppermint—With the advent of the new crop hardly more than weeks away, it could be expected that the price structure would soften notably. However, except for an occasional deal, it appeared that prices were holding relatively firm. Domestic price structures were said to be supported to some extent by export sales volume, but there were some sources who did not lean much toward this view.

Spearmint—Trading was regarded as fair on this item, and the market tended toward a somewhat stronger position pricewise. Several dealers were quoting $4.50 per pound. Export business was certainly not hindered by the British having removed the necessity for a license when importing such oils as spearmint, peppermint, and others from the United States.

Vetiver—Despite the softer tone which has characterized the market over recent weeks, price quotations held unchanged last week. Trading was slow which accounted for the weak structure of prices in the past few weeks. Conditions in primary markets, however, were such that future supplies were not likely to be too abundant. Growers in the Belgian Congo were not at all encouraged by present price levels.

Aromatic Chemicals

Eucalyptol—This item was priced at $1.50 per pound. Demand was steady for limited quantities, with trading described as definitely on the quiet side.

Geranyl Acetate—This newly produced synthetic was expected to find interest and application in the perfume trade, and was undergoing commercial development. Currently, it could be had in 55 gallon drums at $7 per pound, with smaller quantities

Essential Oils

available at correspondingly higher price levels.

Linalool—Synthetically produced linalool, representing total synthesis, rather than production from natural oils, is now available on the market. Current price schedules are as follows: In 55 gallon drums, the price is $5.50 per pound. The 100 pound drums are priced at $5.60. A 20 pound aluminum bottle is priced at $6. A five pound glass bottle is listed at $6.15 per pound, and a single one pound glass bottle at $6.50 per pound. All prices f.o.b. works, or delivered in the Metropolitan New York area.

Advantages claimed for the synethetic material are uniformity, high purity, steady year around supply, and the absence of those fluctuations which usually characterize a market for products based on natural raw materials.

Linalool based on bois de rose was currently priced in drums at $5.80 per pound. Material made from lignaloe wood oil was priced in drums at $5.30 per pound.

Linalyl Acetate—The acetic ester of the synthetic linalool described above was currently quoted at the same price schedule as synthetic linalool in all quantity brackets. Advantages of the synthetic product over acetate made from natural sources were the same as those claimed for synthetic linalool over the natural source material.

Ex bois de rose material was listed in drums at $5.85 per pound on 90-92 percent material. Ex petitgrain source material was priced at $4.80 per pound.

Nerolidol—This item, which is primarily in a market development stage, was produced synthetically and could be had at $25 per pound in drums. Lower price patterns would be expected to follow commercial volume production when usage warrants such volume output. Meanwhile, it was a new synthetic of considerable experimental interest.

Safrol—Prices on this item in most quarters ranged between 88c. and 90c. per pound. Supplies were said to be ample, while demand was on the slow side, and trading spotty.

Seeds and Spices

Chillies—Red peppers were said to have been adversely affected marketwise, by the hurricane effects on the Louisiana crop. The result was that imported grades were being firmly held with no large quantities available on a competitive basis. There was no present shortage of the average grades, but the hot grades were quite tight.

Cinnamon — The No. 0000 grade was off 10c per pound last week, being quoted at $1.15 per pound, as compared with the $1.25 formerly. No. 2, however was unchanged at $1.15.

Ginger — Prices on gingers were off about a cent across the board last week. Cochin, which was the only grade available in quite substantial quantity was priced around 17½ cents per pound. Nigerian ranged from 23½ to 24 cents per pound. Stocks were hardly more than fair, and must last for the balance of the year. Jamaican was in relatively poor supply, with No. 3 priced at 69 cents and No. 2 at 71 cents. Stocks of African and Nigerian were said to be well below normal for this period of the year.

Paprika — This market held generally firm, except that Yugoslavian was off 1 cent per pound. The Spanish grades were unchanged. Trading was generally quiet.

Pepper, Black — The market was felt to have reached its floor, and for the last two weeks there appeared to be developing a strengthening undertone. Price improvement was felt to be in the making, but had not as yet shown any substantial gain. Just what consumer inventory positions were, at this point, was a matter of conjecture, but the feeling was expressed in certain quarters that early Fall demand would soon make this clear.

Generally, it could be said that the market was currently in a position where any substantial buying would promptly lead to upward adjustments in prices. Spot Malabar and Lampong were 26½ cents per pound, with Sarawak at 26 and Ceylon at 27 cents.

Reserve stocks in New York were not building up to any sizable quantity, which would be regarded as a healthy stock position at this time. One of the reasons for the lack of building reserves, was the high cost of moving material into the warehouse, with the result that the tendency was to sell it ex dock. In view of this situation, consumers were advised to maintain coverage for the next three months.

P&G Technical Center To Be Built in Cincinnati

Procter & Gamble will begin construction this month on a technical center in Cincinnati, Ohio, which will permit the company to intensify product development and manufacturing administration activities which have already been accelerated considerably in the past ten years.

Buildings on the 265-acre site are expected to be completed by May, 1959, and will be arranged in "campus" style with space for about 500 employees. They will house product research and development laboratories offices and accompanying service facilities.

SBA's Life Is Extended; Lending Authority Increased

The life of the Small Business Administration was extended for another year and its authority to make business loans was increased by $75 million by the recent action of congress and the signing of S 2504 into law by the President.

Congress passed the bill during a brief break in the debate on the civil rights issue in the senate, but after the SBA had expired by law July 31. The one-year extension was in lieu of a bill previously passed by the house to give SBA permanent status with a big increase in its lending powers.

Standard Chemical Products Is Celebrating Anniversary

Standard Chemical Products, Inc., Hoboken, N. J., and Charlotte, N. C., is celebrating this month the thirty-fifth anniversary of the founding of the company.

Standard Chemical was incorporated in August, 1922, by Louis Grombacher as president and Max Einstein as vice-president for the manufacture of products for the textile industry.

The present plant in Hoboken was built in 1925, while the Charlotte plant was constructed and put into operation in 1954.

American-Marietta

—Continued from page 5

chemicals with headquarters in New York City. The company was established in 1890 and has thirty-seven plants in twenty-two states.

Sinclair & Valentine Company of Canada, Ltd., in which American-Marietta will hold a substantial controlling interest, has eight plants in Canada and is a major factor in the printing ink and allied business in the dominion. Foreign operations are conducted in Mexico, Cuba and Colombia.

Sales of Sinclair & Valentine's combined operations are currently running at an annual rate in excess of $25 million.

Acquisition of Sinclair & Valentine will provide American-Marietta with an established, basic position as suppliers to the packaging, publishing and printing industries.

Under American-Marietta's executive decentralization policy no changes are contemplated. Present management will continue under the leadership of M. J. Leckey, president of Sinclair & Valentine Company. Walter L. Kitchen of Toronto, president of Sinclair & Valentine of Canada, will direct as heretofore the operations of the Canadian company.

American - Marietta's sales in 1956 amounted to $202,310,815.

Tanning Extract Duties

—Continued from page 4

of the "free list" to include tanning extracts previously contained in paragraph 38. Paragraph 1670 of the "free list" presently covers only the raw materials—bark, wood, etc.—used for making dyeing and tanning extracts.

As the law is proposed to be modified by the bill, the following tanning extracts will be allowed entry free of duty:

Chestnut, cutch, divi-divi, hemlock, mangrove, myrobalans, oak, quebracho, sumac, valonia, wattle, and other extracts, decoctions and preparations of vegetable origin used for tanning and combinations and mixtures of the foregoing; all the foregoing not containing alcohol and not specially provided for.

Paragraph 38 of existing law, as modified by the trade agreements, would be limited by the bill to the following dyeing extracts: Chlorophyll, fustic, logwood, persian berry, saffron, safflower, saffron cake, and other extracts, decoctions and preparations of vegetable origin used for dyeing coloring or staining.

The suspension of duties on the tanning extracts would become effective thirty days after the bill became law, and would continue in effect for three years.

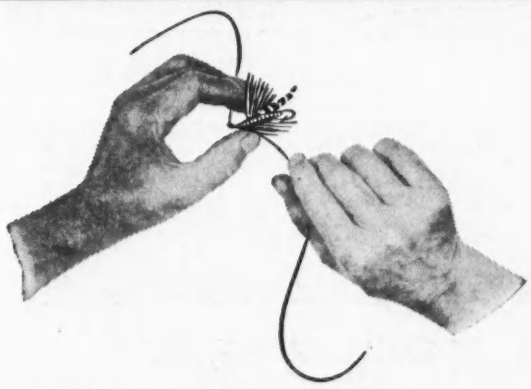
Natural Flower Products
Terpeneless Oils • Essential Oils
Perfume Compounds
Aromatic Chemicals
Flavoring Materials

Ungerer & Co.

CHICAGO BOSTON
PHILADELPHIA ST. LOUIS
LOS ANGELES ATLANTA

161 SIXTH AVENUE • NEW YORK 13, N.Y. Plant and Laboratories, TOTOWA, N. J.

ISO-BERGAMATE
a new aromatic chemical
samples and data on request
DRAGOCO INC. 250 West Broadway, New York 13, N.Y., Tel. CAnal 6-5813-15



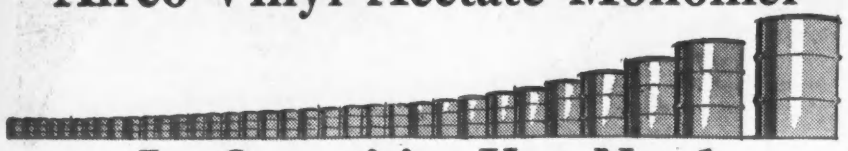
In Skillful Hands

To produce a successful fragrance requires not only technical aptitude and creative artistry, but skill in every step from conception to finished fragrance.

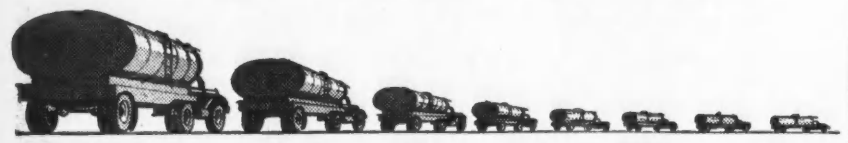
In the selection of your next fragrance, let the skillful and knowing hands of van Ameringen-Haebler perfume chemists serve your needs.

van Ameringen • Haebler, Inc.
521 WEST 57th STREET • NEW YORK 19, NEW YORK
VAN AMERINGEN-HAEBLER, S.A.R.L.
147, RUE J. P. TIMBAUD • COURBEVOIE, SEINE, FRANCE

Airco Vinyl Acetate Monomer



In Quantities You Need



Delivered the Way You Want It

When You Want It

WRITE: Dept. OD, PHONE: MUrray Hill 2-6700, Ext. 334

AIRCO ® AIR REDUCTION CHEMICAL COMPANY

A division of Air Reduction Company, Incorporated

150 East 42nd Street, New York 17, N. Y.

Represented Internationally by Airco Company International

WATER GROUND MICA FOR PAINTS

"SILVERSHEEN SPECIAL" 325 MESH

RICHMOND MICA CORP.

NEWPORT NEWS, VA. 62 WORTH ST., NEW YORK 13, N. Y.

Canada: P. N. Soden & Co., Ltd., 2143 St. Patrick Street, Montreal 22, Canada

For fast service and top quality specify NEVILLE products

RESINS COUMARONE-INDENE, HEAT REACTIVE, MODIFIED COUMARONE-INDENE PETROLEUM

RESINS SOLUTIONS

SOLVENTS COAL TAR, PETROLEUM

SHINGLE STAIN OILS

PLASTICIZING RESINS & OILS

NON-STAINING RUBBER ANTIOXIDANTS

RUBBER RECLAIMING OILS

CHEMICAL SPECIALTIES

NEVILLE CHEMICAL COMPANY • PITTSBURGH, PA.

NEVILLE

Coatings Materials

A firm trend in the primary market for orange shellac drew attention in last week's trading. Local dealers responded with a 1 cent per pound advance in superfine, quoting the material at a range of 34 cents to 35 cents per pound. Other grades were unchanged, but the undertone was firm. Strength in the source market was attributed to seasonally lower supply. This did not apply to bleached shellac, which continued in a steady trend.

Producers of aluminum pigments have posted advances ranging 1½ to 3 cents per pound to cover the higher price of aluminum and other cost increases. Extra-fine paste moved up 1½ cents to 69½ cents per pound in drums. Extra-fine powder increased 2½ cents to $1.11½ and standard powder 3 cents to 81½ cents. Standard paste was technically reduced from 48 cents to 47 cents per pound, but since the material had been moving in trade at the competitive price of 45 cents, the new quotation actually represented an advance of 2 cents per pound. Effective date of the increase was August 5.

The end of the current month is expected to bring seasonal improvement in the market for pigments. In the remaining weeks, plant shutdowns and generally low demand are apt to keep a damper on the market, particularly in such big-volume items as lead, zinc, and copper oxide.

Materials that are being watched closely for possible price changes include the stearate group and copper oxide. The former are subject to upward pressure by an impending ¾ cent hike in citric acid. Weakness in copper chemicals is the result of a lower price for the basic metal.

The spot market for natural resins was reported seasonally moderate, while futures continued inactive. All prices were steady, with Manila copals quoted at 33¾ cents to 36 cents per pound for C, 25 cents to 28 cents for DBB, 14 cents nominally for DK dust, and 19¾ cents to 22 cents for MA. Grades CBB, DK and WS continued out of stock because of absence of buying interest.

Reports from producers of synthetic resins and plasticizers indicated that while summer doldrums still characterized the market, seasonal improvement was soon expected. Heavy production of automobiles for the fall market was expected to spur consumption of resins in the weeks ahead. The asbestos industry was also looking forward to an upturn in sales owing to an increase in housing starts.

House bill HR 38 has been passed and is now ready for Senate approval. This legislation would remove the duty on imported casein, thus resulting in a savings of 2¾ cents per pound for consumers. While the bill has been pending the market has continued almost inactive, with buying restricted to minimal requirements. Small quantities of material are being sold at 24¼ cents to 25½ cents per pound, delivered, duty paid, prompt shipment. Domestic prices are steady at 56 cents per pound for 30 mesh and 64 cents per pound for 80 mesh.

This lack of activity in the American market reportedly contributed to a decline in Argentine exports during the month of May. According to the Buenos Aires stock exchange, exports totaled 2,110.1 tons, as compared with 3,439.9 tons in April. The cumulative total for the year, however, was still well ahead of last year's figure—14,187.7 tons, as against 11,254.7 tons.

Price Trends

Advanced

Aluminum paste, extra-fine, 1½c. per lb.
Powder, extra-fine, 2½c. per lb.
Powder, standard, 3c. per lb.
Shellac, superfine, 1c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
100.77	100.76	100.74	100.13

For Current Prices See Page 9

Chrome Colors—No price changes have been reported since the first of the year. Revisions at that time brought quotations 1½c. to 2½c. per pound higher. Chrome green is quoted at a range of 42c. to 46c. per pound, the differential reflecting variations in blue content. Both orange and yellow are listed at 35c. per pound. Prices are 1c. to 1½c. higher outside the standard delivery zone.

Copper Oxide—Two major producers have lowered the price of copper metal by ¾c. per pound. This resulted in immediate price readjustments in some of the derivatives, but as yet there has been no action by oxide manufacturers. Black oxide remains quoted at 47c. per pound in 100 to 1,999 bags lots; USN Type I red is 48½c. per pound, same basis, while Type II is 46¼c. per pound, same basis.

Lead Pigments—The end of the month should bring the beginning of seasonal improvement in this market. In the intervening weeks, plant shutdowns and generally low demand for exterior coatings are expected to produce a lean market for red lead, litharge and orange mineral. Basic lead carbonate and silicate are also meeting lower interest but the season influences are reportedly less extreme. Quotations of the latter materials are steady and unchanged at long established levels. The red pigments were moved downward with the metal a short time back. Carlot quotations are 16¼c. per pound for 95 percent red lead, 16.95c. for 97 percent, and 17.85c. for 98 percent. Litharge in carlots is 16c. per pound.

Zinc Pigments—The failure of zinc oxide to follow the metal in recent declines that totaled 3c. per pound was considered surprising in some quarters because of the contrast with previous market behaviour. However, sources in the trade have pointed out that there is no real economic connection between American process oxide and the basic metal. Price fluctuations in zinc depend upon supply of the finished metal and other market considerations. Crude zinc ore—from which American process oxide is derived—is seldom involved in these gyrations. For this reason, some observers regard the policy of linking oxide quotations to the price of finished zinc as more a matter of custom than anything else.

If the latest development means that oxide prices will be independent of the zinc market, it will be welcomed as a move in the direction of stability, and will accord with a gradual but consistent trend in the pigment industry.

Prime Pigments

Aluminum Pigments — Quotations of powder and extra-fine paste were advanced, effective August 5, to offset higher costs of manufacture and a price increase in aluminum metal. Extra-fine paste advanced 1½c. to 69½c. per pound in drums. Extra-fine powder is 2½c. higher at $1.11½ per pound, while standard is up 3c. per pound at 81½c.

Although the price of standard paste was ostensibly reduced from 48c. to 47c., the new price actually represents an increase of 2c. per pound, since prior to August 5, competition was being met universally at 45c. per pound rather than at the list price.

Natural Resins

Copal Gum—Activity in the spot market is reported seasonally moderate, while the futures market continues generally inactive. All prices are unchanged, with Manila materials quoted at 33¾c. to 36c. per pound for C, 25c. to 28c. for DBB, 14c. nominally for DK dust, and 19¾c. to 22c. for MA. The grades CBB, DK and WS have not been in stock for some time.

Dammar Gum—Supply is adequate for all grades of dammar that are currently in demand. There were no price changes last week. A normal volume of business was transacted for immediate requirements. The most recent price changes consisted of 1c. reductions in Siam and Singapore No. 1, posted about two weeks ago.

Shellac — Source conditions contributed a firmer tone to the local market last week, causing a 1c. advance in superfine to a range of 34c. to 35c. per pound. The new

Coatings Materials

crop in India has not been gathered yet and supply of oldcrop material has lightened. Until new supplies reach Calcutta, the market tone should remain strong, according to local dealers. Unchanged quotations of lemon shellac are 39c. to 41c. per pound for No. 1 and 37c. for No. 2. There is no demand for TN and consequently no supply.

Bleached shellac, currently subject to moderate buying interest, is quoted at 48c. per pound for bonedry in bags, 1,500 pound lots. Refined shellac is 58c. per pound, same basis. Supply is rated adequate.

Miscellaneous

Casein—Exports of Argentine casein in May amounted to 2,110.1 tons, according to reports by the Buenos Aires stock exchange. This total represents a decline from the uniformly high level maintained in the earlier months. For instance, in April, exports had totaled 3,439.9 tons. The cumulative total for the year, however, is still well ahead of last year's figure —14,187.7 tons, as compared with 11,254.7 tons. Declining exports to the United States are presumed to have been a main influence in the low total registered in May.

House bill H. R. 38, which would remove the duty on imported casein has been passed and is now ready for Senate approval. Passage of the bill is expected to bring about a savings of close to 2¾c. per pound for consumers. Consequently, many consuming mills are postponing buying commitments in the hope that final action will be taken before the end of this session of congress.

Under these circumstances very little business is being transacted. Small quantities of material are being sold at about 24¼c. to 24½c. per pound, entirely for prompt requirements. Domestic prices continue steady at 56c. per pound for 30 mesh and 64c. per pound for 80 mesh.

Stearates—With a ¾c. advance in stearic acid having been reported last week, prices of stearates may possibly move higher. Stearate quotations are not pegged to the acid, but a change in the latter is always an important factor when price schedules are made up. The last changes in stearates were posted early in the year after a revision in the citric acid quotation.

Naval Stores

Pine Gum—For the week ended July 27, the average price per standard barrel of crude pine gum was reported at $25.90, as compared with $25.81 in the previous week and $26.79 a year ago. The volume of gum deliveries to plants totaled 20,750 barrels, as against 21,681 the previous week and 22,108 a year ago. Average per barrel content included 11.24 gallons of turpentine and 299.6 pound of rosin. Gum grading percentages were as follows:—WW, 48, WG, 19; N, 15; M, 15; and K and below, 3.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Aug. 2	Mon. Aug. 5	Tues. Aug. 6	Wed. Aug. 7	Thur. Aug. 8
Drums—					
I	$7.45	...	...	...	$7.50
K	...	...	...	...	7.50
M	...	...	...	...	7.50
N	7.50	$7.615	...	...	...
WG	...	...	...	...	7.80
WW	...	...	$8.06	...	...
Bags—					
G	...	...	7.35[1]	...	...
H	7.28[1]	...	...	...	...
M	...	...	7.30[1]	...	...
N	...	...	...	$7.56	...
WG	...	...	7.75	7.83	...
WW	...	...	7.97§	7.95	...

Tankcars (for week ended August 2)—WG, $7.40; N, $7.23; K or better, $7.05

Sales, USDA

240* 80* 452* 160* 160*

New York

(Per 100 lbs., c.l., Friday)

WW, $9.40; WG, $9.15; N, $8.85; M-I, $8.75

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.546§	.55	...	.546§	.542§
Sales	30,000¶	4,000¶	...	40,000¶	22,000¶

New York, Friday, per gal. 7 lbs., tankcars, 66c., l.c.l., 82c.

* Drums equivalent. ¶ Gallons. § Average price. [1] Or better.

Casein Import

—Continued from page 5

has made it economically impossible to produce casein in this country in competition with imports.

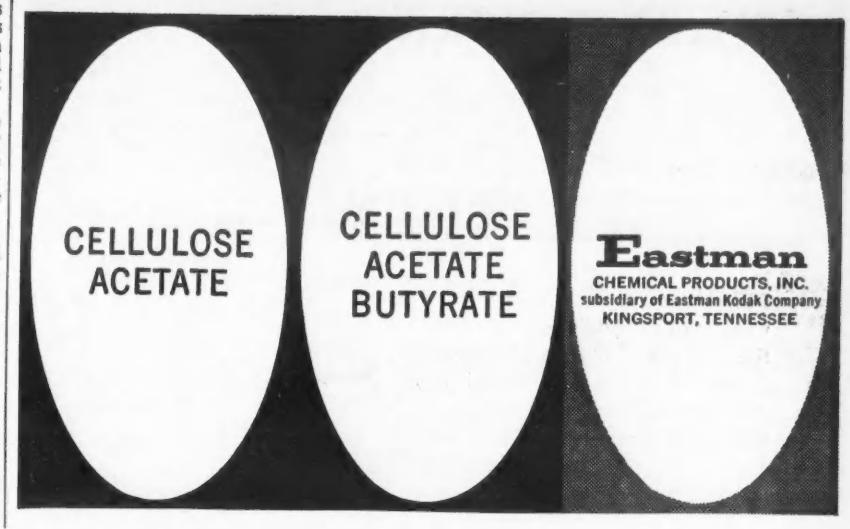
"The yield of dried skim milk from a given quantity of liquid skim milk is 3.3 times as great as the yield of casein," the commission pointed out. "With the price of dried skim milk being supported at 16 cents a pound for spray and at 14¼ cents per pound for roller, casein manufacturers would have to obtain from 47 to 53 cents per pound for casein in order to obtain the same return from their raw material converted into casein as they would if it were converted into dried skim milk.

"Since the average annual foreign value of imported casein was 13.2 cents per pound in 1953, 17 cents per pound in 1954 and 18.2 cents per pound in 1955, domestic casein has not been able to compete pricewise with the imported product, and producers have found it to their advantage—particularly so after the removal of the import quota on casein under section 104 of the defense production act of 1950—to convert their raw material into dried skim milk rather than into casein."

Reports also were submitted to the committee by the departments of state, Treasury and labor entering no objections to passage of the bill.

Cyanamid Fills Sales Post

H. W. Bajak has been appointed assistant general sales manager of American Cyanamid Company's fine chemical division, New York.



Own raw material source. Oronite was the first producer of PHTHALIC ANHYDRIDE from ortho-xylene, a petroleum derivative. Oronite's close affiliation with a major petroleum producer assures you a dependable source now and in the years ahead.

Increased manufacturing facilities. Recently expanded production assures you phthalic anhydride of highest quality when you need it.

New, large storage facilities. Quick delivery of product from storage terminals in close-by Eastern centers to serve you better. Also available in molten form.

Have you investigated ISOPHTHALIC?

This new Oronite raw material makes possible lower cost resins that out-perform higher cost resins. It has already provided many companies with new or improved protective coating products. For complete information on Oronite Phthalic Anhydride or Isophthalic—contact the Oronite office nearest you.

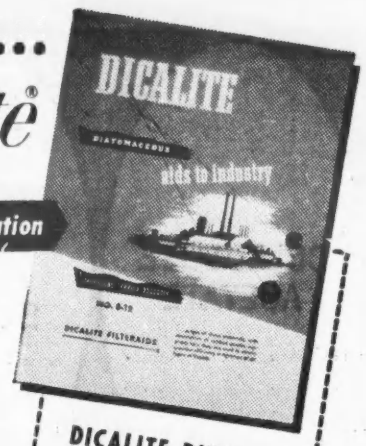
ORONITE CHEMICAL COMPANY

EXECUTIVE OFFICES
200 Bush Street, San Francisco 20, California
SALES OFFICES
New York, Wilmington, Chicago, Cincinnati, Dallas, Los Angeles, San Francisco
EUROPEAN OFFICE
36, Avenue William-Favre, Geneva, Switzerland

4291

FILTER IT RIGHT... with *Dicalite*®

...and here's valuable data on filtration



DICALITE BULLETIN B-12 gives a wealth of authoritative data on effective methods of filtration, applicable to the processing of essential oils, penicillin and other antibiotics, and other pharmaceuticals. Write, today, for your free copy, to

DICALITE DIVISION
GREAT LAKES CARBON CORPORATION, Dept. POD,
612 SO. FLOWER STREET,
LOS ANGELES 17, CALIF.

Casein ALL GRADES
• SULPHURIC
• MURIATIC
• LACTIC
• RENNET

Casein for paper coating, adhesives, cold water paints, rubber, plastics.

NATIONAL CASEIN
National Casein Co., Chicago 20, Ill.
National Casein of New Jersey
Riverton, N. J.

TIN CANS
All types and sizes for
DRY OR LIQUID PRODUCTS
FAIR PRICES
COLUMBIA CAN COMPANY
59-27 54th Street, Maspeth 78, N.Y.
HEgeman 3-1571

ONE STOP • ONE STOP • ONE STOP • ONE STOP • ONE STOP SERVICE

FOR ALL COLORS, MINERAL FILLERS AND PIGMENTS

ASBESTOS	COPPER OXIDE	PUMICE STONE
BARYTES	GILSONITE	REDS
BENTONITE	GRAPHITE	SIENNAS
BLANC FIXE	IRON OXIDES	SILICAS
BLUES	LAMP BLACK	STEARATES
BROWNS	LIME	TALCS
CALCIUM CARBONATES	LITHOPONE	TALL OIL
CARBON BLACK	MAGNESIUM CARBONATE	UMBERS
CHROME COLORS	MAGNESIUM OXIDES	YELLOW OCHRES
CHROMIUM OXIDES	MANGANESE OXIDE	ZINC YELLOW
CLAYS	MICA	

Serving Effectively for Nearly Four Decades

SMITH CHEMICAL & COLOR CO., INC.
55 JOHN STREET BROOKLYN 1, NEW YORK
FABRICATORS OF MINERAL COLORS—Agents for NATIONALLY KNOWN MANUFACTURERS

Additives a Necessity in Food: Scientists

—Continued from page 3

divided into three general subjects—the addition of chemicals to foods as useful substances; the safety factors; and health hazards with emphasis on carcinogens.

This latter was given special attention because of the fear that has been developing in public minds that cancer-producing chemicals were being used in foods, and because some of the bills specifically require pretesting of additives to determine whether whether they are capable of producing cancer.

One of those who spoke most strongly against the rising fears of the public was Dr. John H. Folger, director of medical research of E. I. duPont de Nemours & Co., Wilmington, Del. He told of comparative studies of the health of the employees of duPont which showed that over a seventeen year period instead of the health of the workers deteriorating, the contrary was true.

Since 1940 the average daily loss for non-industrial sickness among duPont workers dropped from seven to five, he said, and this was in spite of the fact that these workers are in daily contact with chemicals of all kinds, plus eating the same foods that other people eat. Similar experiences are cited by other companies, he added. The studies, therefore would tend to refute the claims that chemical workers might accumulate chemicals in their systems by their daily contacts with the chemicals which, in addition to those chemicals they might ingest in foods, would prove hazardous, he said.

Apprehensions Dangerous

"The apprehensions of the last ten years caused by scare headlines on food additives," Dr. Folger declared, "could well have had more injurous effect on the people than the additives."

Dr. Emil M. Mrak, chairman of the department of food technology of the University of California Agricultural Experiment Station, opened the discussions by tracing the influences of chemicals on food production, nutrition, and consumption over the past fifty years.

He pointed out that there are three factors that influence acceptability of foods by the public — flavor, color and texture. Acceptance of a commodity invariably goes up when properly colored, he added, while convenience to the consumer is another factor influenced by chemicals.

He emphasized that chemicals are necessary for foods to maintain their nutritive values, keeping qualities, to make the foods attractive to consumers, and are essential aids in the processing of foods.

Dr. Harvey K. Murer, manager of the research center of General Foods Corporation, Tarrytown, N. Y., also spoke on the usefulness of chemicals which he said must be judged technically and for each chemical on its own merits.

The usefulness of an additive in the final analysis, he added, is determined by the consumer, and if a chemical has brought a useful food to the public and is accepted, then the chemical has performed its job.

'Should Not Stifle Advances'

"We cannot and should not in any way stifle these chemical advances that have brought such good and wholesome foods to the American public," he said. "We cannot standardize procedures, either in determining the usefulness of a product or its nutritive value. The consumers are the ultimate judges. The public interest lies in stimulating and encouraging technology and cooperation with the chemical industry."

Dr. F. N. Peters of the research laboratories of Quaker Oats Company, Barrington, Ill., emphasized the importance of recognizing the fact that everything in nature is not benign, or that the addition of anything to natural foods is hazardous. He gave several illustrations of how laboratory animals have been killed by innocent foods which had not been properly treated first.

Summarizing this first part of the panel discussions, Dr. Darby noted that the opinions of the experts were that the use of additives is not of recent vintage and that there are technical needs for use of additives in foods.

These included the maintenance of nutritive qualities, keeping qualities, making foods more acceptable to the public and aiding in the processing of foods. He noted that the additives should not be used to disguise quality, deceive consumers, or reduce nutritive values.

During this part of the discussion, several committee members asked about the use of colors. Dr. Darby said that he would not conclude the use of colors is necessarily deceiving consumers, and Dr. Mrak pointed out that color is sometimes a very important factor in acceptability.

The panel discussions on evaluating safety were opened by Dr. R. Blackwell Smith, president of the Medical College of Virginia, who noted that there were three crucial points of consideration:—

1. Every additive presents a problem peculiar to itself because every additive is a separate subject. What is sometimes forgotten is that everything taken into our body is capable of producing injury so it means nothing to say that something is toxic unless capacity is considered also.

2. Since every additive is different it is not possible to accept any standard that will apply to the testing of all food additives. A scientist must be free to design the experiment needed in each case.

3. When establishing a level of safety, it is only possible for the scientists to establish a "reasonable" level of safety.

Discusses Various Tests

Dr. William D. Deichman, chairman of the department of pharmacology of the University of Miami School of Medicine, Florida, discussed the differences between acute toxicity tests, subacute tests, and chronic tests.

He believed that as much can be learned from the subacute tests as from chronic tests, except in the case of cancer-producing elements. The chronic tests, because of their long duration, will give a chance for cancer to show.

Dr. Maurice H. Seevers, chairman of the department of pharmacology of the University of Michigan, told the committee that he knew of no chemical compounds which, if taken by mouth in the amounts put in foods, has ever produced cancer in a laboratory animal.

Ha added that in the final analysis the only thing that can be expected of the scientists are intelligent guesses based on the facts as they develop from the tests,

Tamms

NEW!

DUSTEX MICRO-SILICA

Soft amorphous type with these special features:

OIL ABSORPTION (G & C)	36.4 to 40.3 LBS.
pH VALUE	5.0 to 5.2
MOISTURE	0.5%

PARTICLE SIZE RANGE 1 to 15 microns
98% MINUS 10 MICRONS

New improved equipment assures highest quality and production control

WRITE TODAY FOR SAMPLES, PRICES AND SPECIFICATIONS

DEPT. RM-2
TAMMS INDUSTRIES, INC.
228 N. LA SALLE ST., CHICAGO 1

and persons making the tests should not have their hands tied by any standard type of procedure.

Dr. Henry Smith, jr., of the Mellon Institute, told of the research work done by his staff. He said that when it becomes evident that the profits on a chemical are never going to be large enough to recover the costs of the studies on whether the chemical would be safe as an additive in foods, the chemical is never offered for sale for that purpose.

He pointed out that toxicity studies are expensive to conduct—running between $30,000 and $40,000 for a two-year period. He advocated all information on which food additives have been declared to be safe being published and available to other scientists for their use. That is not the case today, however, he added.

Principle 'Firmly Established'

Dr. Howard C. Spencer of the biochemical research department of Dow Chemical Company, Midland, Mich., pointed out that the principle of pretesting is firmly established in industry, and emphasized the need for complete freedom in research for the scientists. "There are no cookbook rules for testing," he said.

In the discussions of cancer-producing properties of chemicals, Dr. Morton L. Levin, director of the Commission on Chronic Illness of the New York State Department of Health, noted that cancer is a disease that has multiple causes "but despite this known fact we do not yet know the common denominator—what it is in these causes that produce cancer."

He said that the profession is not yet able to predict on what is now known whether a particular chemical will produce cancer. It is known, for example, that a chemical that produces cancer in an animal will not always produce cancer in man.

Dr. Folger of duPont entered the discussions on cancer to point out that in the legislation before the committee, the committee is not dealing with a type of substance like pesticides which have the specific purpose of killing organisms, but it is dealing with substances which are considered safe at the start of the tests.

He pointed out that as soon as a product becomes suspect, it is immediately withdrawn from the market. As examples, he cited the cases of agene, which had been used for years in the manufacture of wheat flour, and coumarin. He emphasized that industry is continuously policing itself.

Asked by Rep. Joseph O'Hara of Wisconsin whether he felt the need of legislation in view of industry's own policing activities, Dr. Folger replied that he did believe that the voluntary methods of testinging should be made mandatory. He added later that he thought only the minimum of legislation necessary to do the job should be neacted.

'No Evidence' Noted

Dr. Paul R Cannon, chairman of the department of pathology of the University of Chicago, agreed with Dr. Folger that "we have no evidence today that any cancer causing additives are in our foods—we have only the fear, but no evidence." He noted that the matter of cancer has been of growing concern only for the past twenty five years and that evidence is so incomplete that "we are in no position to formulate doctrine on causes of cancer."

Dr. W. C. Hueper of the National Cancer Institute, National Institutes of Health, Public Health Service, said that there are numerous instances of cancer in industrial workers in contact with chemicals. He mentioned the experience of workers in the tanning industries as an example. He also referred to other hazards developing to face the population as a result of technological advances of industry, and read a list of chemical compounds which he said are known to be capable of causing cancer. Later, he clarified his statement as not meaning that these chemicals are being used in foods.

He said that he did not think that anyone can establish a "safe dose" of a carcinogen and "I don't know where a safe dose of environmental carcinogens can be placed"

"We would be wise,' he concluded, "to exclude any carcinogenical chemical from our food supplies, because of the lack of knowledge of the safe limits"

Dr Emerson Day, chief of the division of preventive medicine of Sloan-Kettering Institute for Cancer Research, stressed the long-time period of testing for cancer-producing properties in chemicals that would affect man, and deplored the adverse publicity that has been given to the hazards of chemicals based on the limited knowledge now available

Dr. Herbert E. Carter, of the department of chemistry and chemical engineering of the University of Illinois, defended the scientists against veiled attacks on their professional ethics He knew of no scientist worthy of his title who would be swayed by the "front" office from stating the facts and conclusions of his research work

In a written statement submitted to the committee by its chairman, J. David Hayden, Drug, Chemical and Allied Trades section of the New York Board of Trade backed complete evaluation of manufacturers' formulae and tests by FDA. He pointed out that a time limited on acceptance of new developments is necessary for the protection of the drug and chemical industries.

Mr. Hayden stressed that FDA always has recourse to the injunctive process if it will not approve any food additive solely on the basis of full information submitted to it by the manufacturers.

The DCAT statement also recommends the exclusion from new legislation of all additives now in use, contending that they have been tested under the stringent provisions of the federal food, drug and cosmetics act of 1938. Mr. Hayden said that re-examination of existing products would place an unnecessary burden on producers.

FLATTING
THICKENING
SUSPENSION
LUBRICATING
WATERPROOFING
PRESERVING
HARDENING
BLEED PREVENTION
QUENCHING

METASAP STEARATES CAN HELP YOU DO THESE JOBS BETTER

Write Today

METASAP CHEMICAL COMPANY
A NOPCO Subsidiary
HARRISON, N. J.
Chicago, Ill. • Boston, Mass.
Cedartown, Ga. • Richmond, Cal.
London, Canada

THE CLEANEST STEARATES MADE!

REGULAR • COATED • PELLETIZED • GRANULAR

ST. JOSEPH LEAD CO. — ST. JOE ZINC OXIDE — JOSEPHTOWN, PA. — Lead-Free

ZINC OXIDE

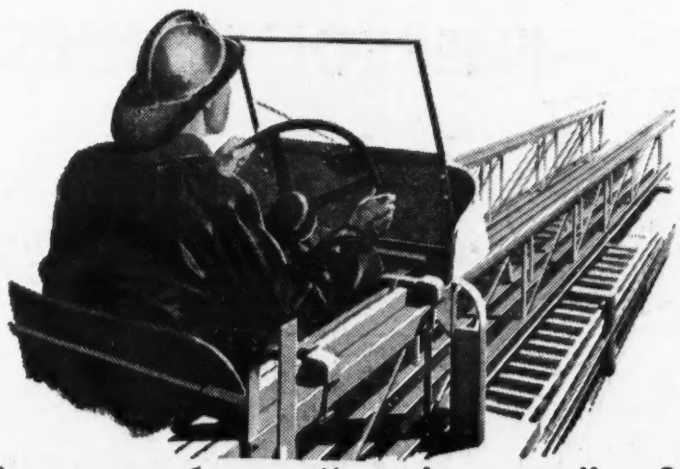
Make Note of Our Nearest Distributor and Call on him for Prompt Service

ST. JOSEPH LEAD COMPANY, 250 Park Ave., New York 17, N.Y.

AKRON, O. — Harwick Standard Chemical Co., 60 S. Seiberling St.
ALBERTVILLE, ALA. — Harwick Standard Chemical Co.
ATLANTA, GA. — Southern States Chemical Co., 1061 W. Marietta St., N. W.
BALTIMORE, MD.—William McGill, 237 President St.
BOSTON, MASS.—Harwick Standard Chemical Co. of Mass., Inc., 661 Boylston St.
BUFFALO, N.Y.—James O. Meyers' Sons, 290 Larkin St.
CHARLOTTE, N.C.—Southern States Chemical Co., 1039 Bond St.
CHICAGO, ILL.—Fred A. Jensen & Associates, 310 N. Dearborn St.
CINCINNATI, O.—C. L. Zimmerman Co., N. 303 Cincinnati Union Terminal
DALLAS, TEX. — Thompson-Hayward Chemical Co., P. O. Box 6226
DENVER AREA—Application Engineers, Inc., 100 Jefferson St., Englewood, Colo.
DETROIT, MICH. — Matteson - Van Wey, Inc., 403 Baltimore Ave. W.
GREENVILLE, S.C.—Southern States Chemical Co., 25 Peden St.
HOUSTON, TEX.—Thompson-Hayward Chemical Co., P. O. Box 4557
INDIANAPOLIS, IND.—Meyer Materials, Inc., 5505 No. Keystone
KANSAS CITY, MO. — Thompson-Hayward Chemical Co., 2915 Southwest Blvd.
LONG ISLAND CITY, N.Y. — C. Withington Co., Inc., 47-40 Fifth Street (paint industry only)
LOS ANGELES, CAL. — Harwick Standard Chemical Co., of Cal., 1248 Wholesale St.
MEMPHIS, TENN.—Thompson-Hayward Chemical Co., 493 N. Front St.
PHILADELPHIA AREA—Van Horn, Metz & Co., Inc., 241 E. Elm St. Conshohocken, Pa.
PITTSBURGH AREA—R. L. Weaton, c/o St. Joseph Lead Co., Monaca, Pa.
NORTH LITTLE ROCK, ARK. — Thompson-Hayward Chemical Co., P. O. Box 413
OKLAHOMA CITY, OKLA.—Thompson-Hayward Chemical Co., 828 W. Second St.
OMAHA, NEB. — Thompson-Hayward Chemical Co., 1110 S. Fourth St.
PORTLAND, ORE.—Cordano Chemical Co., 56 S. E. Belmont St.
ST. LOUIS, MO.—J. E. Nichaus & Co., Inc., 3419-21 Gratiot St.
ST. PAUL, MINN.—George C. Brandt, Inc., 760 Vandalia St.
SAN ANTONIO, TEX. — Thompson-Hayward Chemical Co., 222 Seguin St.
SAN FRANCISCO, CAL. — L. H. Butcher Co., 15th & Vermont St.
SEATTLE, WASH. — Great Western Chemical Co., 1212 Sixth Ave., So.
TRENTON, N.J.—R. E. Carroll, Inc., P. O. Box 139
TULSA, OKLA. — Thompson-Hayward Chemical Co., 36 N. Guthrie
WICHITA, KAN.—Thompson Hayward Chemical Co., 727 E. Osie

FOR
NITROCELLULOSE (Film) SOLUTIONS
NITROCELLULOSE (Cotton) SOLUTIONS
SPECIAL FORMULATIONS — (Lacquers or Paints)
CELLULOSE TRIACETATE (Safety) FILM SCRAP (Flakes or Rolls)
PIGMENT DISPERSIONS (Agents for Pennsylvania Color & Chemical Co.)
SOLVENTS AND ADHESIVES

Call on HORN, JEFFERYS & CO.
20 W Burbank Blvd., Burbank, Calif. Phones: THornwall 6-2121—Victoria 9-1394



Are you always "putting out fires?"

Frequent crises in production lines can quickly consume the profits. Picco products are always standing by to fill your processing needs. The wide variety of thermoplastic resins and solvents produced by Pennsylvania Industrial Chemical Corporation are readily available to "put out fires" in your production lines.

PICCOPALE—petroleum polymers
PICCO RESINS—para-coumarone indene
TRANSPHALT—low cost dark colored resins
OILS—aromatic and semi-aromatic high boiling oils
PICCOLYTE—poly terpenes
PICCOLASTIC—low molecular weight styrenes
PLASTICIZERS—aromatic poly olefins
MODIFIED STYRENE COPOLYMERS—substituted styrene copolymers
SOLVENTS—water white aromatics

There is a Picco Sales-Chemist near you—
phone, wire, or write the office most convenient for you.

PENNSYLVANIA INDUSTRIAL CHEMICAL CORP.
Clairton, Pennsylvania
Plants: Clairton, Pa.; West Elizabeth, Pa.; and Chester, Pa.
Sales Offices: Atlanta, Boston, Chicago, Cincinnati, Cleveland, Detroit, Jacksonville, Los Angeles, Minneapolis, New Orleans, New York, Philadelphia, Pittsburgh, San Francisco

WHAT DO YOU HAVE IN MIND FOR **RED OILS?**

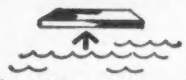
SWIFT'S RED OIL

SOLEXOL, Swift's unique *selective* extraction process permits a high degree of control over decolorization and removal of impurities. As a result, our customers can select from a variety of Oleic Acid and Red Oil products. There's one for the most common . . . or the most obscure use. And there's one to fit the purse, as well as the process. *Write for Red Oil folder* today:

SWIFT & COMPANY,
Technical Products Dept.,
1844-165th St., Hammond, Ind.

To Serve Your Industry Better Swift

"FLOAT" SOME IRON?



An efficient collector for separation in iron ore flotation processes, Swift's Red Oil is low in titer, high in uniformity.

MAKE A MIX?

For use in emulsifiers for the lightest colored wax or in cosmetics, Swift's Red Oil is of dependable quality; has good color and uniformity.

CLEAN HANDS—NO WATER?

As an emulsifier and jelling agent, soaps from Swift's Red Oil serve many grades of waterless hand cleaners.

WAXES

NATURAL, COMPOSITION AND SYNTHETIC

Waxes spanning every conceivable industrial use, from cosmetics to Christmas candles, from collapsible tubes to carbon paper. More than 74 years' experience is at your disposal. Got a wax problem? Ask us.

STROHMEYER & ARPE COMPANY
139 Franklin Street, New York 13, N. Y. WA 5-2300

EMERSOL® ELAINES

hand your product

6 better chances

FOR REPEAT SALES!

1 **LIGHTER COLOR**—Because Emersol Elaines (Oleic Acids) resist the darkening effects of high processing temperatures, your products will be lighter in color.

2 **BETTER ODOR-APPEAL**—Initial bland odor...and superior oxidation stability of Emersol Elaines are reflected in your product's ability to withstand decomposition longer.

3 **BETTER KEEPING QUALITIES**—The exceptional resistance to rancidity and yellowing of Emersol Oleic Acids contributes measurably to your product's keeping qualities.

4 **UNIFORM PERFORMANCE**—The uniformity of Emersol Elaines translates into consistent top performance in your products.

5 **HIGHER QUALITY**—Low unsaponifiables mean higher yields, less undesirable impurities in your product, encourage repeat sales.

6 **LOWEST COST**—Despite their high purity, Emersol Elaines cost no more than ordinary competitive grades, yet can mean savings in processing and added sales appeal to your products.

Write Dept. O today for 20-page Emeryfacts booklet titled, "Emersol Oleic Acids."

Emery FATTY ACID SALES DEPT.

Emery Industries, Inc., Carew Tower, Cincinnati 2, Ohio

New York • Philadelphia • Lowell, Mass.
Chicago • San Francisco • Cleveland
Ecclestone Chemical Co., Detroit
Warehouse stocks also in St. Louis, Buffalo, Baltimore and Los Angeles
Export: Carew Tower, Cincinnati 2, Ohio

Oils, Fats and Waxes

Increased offers of new crop cottonseed oil resulted in sharply lower prices for crude and refined grades. This was reflected in competing oils and corn also dropped sharply, while soybean oil was irregular but closed steady with beans. Buying interest lagged for edible grades and was a contributing factor. Crude coconut oil came to life and with supplies tight for prompt shipment. This market was sharply higher for prompt and later shipment. Copra also was stronger. Lard continued inactive and declined fractionally. Oleo stearine was firmer and higher.

Sold up production of tallow and greases kept the market in a firm position, despite limited trading. Prices were without change and maintained at current levels.

Increased cost and tallow and was reflected in animal fatty acids. Oleic, stearic and tallow acids were advanced ¾ cents per pound last week. Vegetable acids were quotably unchanged but remained steady due to scarcity of available vegetable oil foods.

Sharp advances in flaxseed resulted in another fractional advance in linseed oil. Consumers continued to limit demand for tung oil to actual needs. Market remained unchanged and strong. Buyers and sellers still awaited government's announcement of import duty or quotas on imported oil. Imported and domestic grades of castor oil contined firm and unchanged.

Linseed and cottonseed meals were higher for prompt and forward shipment. Soybean meal remained steady at higher levels.

Price Trends

Advanced

Cocoa butter, 1c. per lb.
Coconut oil, crude, ½c. per lb.
Copra, $7.50 per ton
Cottonseed meal, $2 per ton
Linseed meal, $1.50 per ton
Linseed oil, 3/10c. per lb.
Linseed oil fatty acid, 3/10c. per lb.
Oleic acid, ¾c. per lb.
Oleo stearine, ¼c. to ½c. per lb.
Ouricury wax, crude, 1c. per lb.
Peanut meal, 50c. per ton
Peanut oil, crude, ⅛c. per lb.
Soybean meal, $2 per ton
Stearic acid, ¾c. per lb.
Tallow fatty acid, ¾c. per lb.

Reduced

Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Cottonseed, crude, ¼c.-⅜c. per lb.
Refd., ⅜c. per lb.
Lard, cash, 3/10c. per lb.
Soybean oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
117.67	115.51	114.53	116.86

For Current Prices See Page **9**

Vegetable Oils

Castor—Trading was spotty, but market remained steady for domestic and foreign oils. No. 1 Brazilian was held at 22¾c. per pound, tankcars, New York, prompt delivery.

Imports of castor beans and castor oil, at New York and Philadelphia last week were as follows:

	Pounds	
	Beans	Oil
Last week	84,000	1,166,000
Previous week	123,000	1,468,000
Corresponding week, 1956	370,950	6,336,000
Total this year	12,529,900	62,323,000
Corresponding period, 1956	30,468,100	52,683,000

Coconut—Crude was stronger and sharply higher with copra. Prompt shipment was nominal at 12c. per pound, tankcars, f.o.b. Pacific coast August following trading at 11¾c. September was higher at 11¾c., same basis. The New York market also was stronger with sales at 12½c., and 12⅝c. asked, tankcars, prompt delivery.

Corn—This market was easy and lower. Crude was sold at 13⅛c. per pound, tankcars, f.o.b. mills prompt delivery. Refined was lower at 16.78c. per pound, tankcars New York, prompt delivery.

Cottonseed—Futures on the New York Produce Exchange last week backed and filled, reaching new lows for the current move due chiefly to favorable cotton crop news. Offers of new crop crude at lower prices weakened the cash market and crude and refined grades declined sharply. Consuming interest continued slow.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, August 9, follow:

	Sales	High	Low	Close
		Cents per pound		
Sept.	285	15.23	14.96	15.06S
Oct.	101	15.19	14.98	15.02S
Dec.	193	15.15	14.94	15.03S
Mar.	59	15.21	14.98	15.11@15.13
May	26	15.18	15.00	15.11@15.15
July (1958)	3	15.08	15.02	15.08@15.12

Total sales and switches, 667 contracts.

Refined salad dropped to 16½c. per pound, tankcars, New York, prompt delivery. The cotton crop report was slightly below expectations, but had little effect on the market. The government estimated the crop at 11,897,000 acres as of August, compared with the 1956 production of 13,310,000 bales and 1946-55 average of 13,669,000 bales. Yield per acre was indicated at 416 pounds against 409 bales last year and 10-year average of 300 pounds. Under average conditions the predicted crop would produce 4,896,000 tons of cottonseed compared with 5,423,000 tons last year, according to the Department of Agriculture. The senate passed a bill to extend PL480 for another year and it was sent to the White House. The law provides for an additional $1.3 billion to cover the PL 480 program, and authorizes the disposal overseas of government owned surplus agricultural products.

Crude was easy and lower. Light sales were reported at 13c. per pound, tankcars, prompt delivery in the Valley and October-December was quoted at 12½c. Crude was offered at 12⅞c. Waco and 12⅝c. Lubbock.

The Census Bureau reported crude and refined cottonseed oil export declarations totals for June at 41,076,880 pounds.

Linseed—Sharp price advance in flaxseed further stiffened linseed oil and quotations were lifted 3/10c. to 6/10c. per pound, according to position. Tankcars were adavnced 3/10c. to 13.2c. per pound, Minneapolis, August-October delivery; 4/10c. to 13.4c., for November-January and 6/10c. to 13.6c., for February-April, same basis. Withdrawals against contracts were moderate and up to seasonal volume.

Reports from the Argentine stated that the government sold 31,000 metric tons of raw linseed oil to exporters, believed to be for shipment to Russia and east Germany.

Flaxseed—Market trend continued upward, prices advanced 7c. per bushel.

Government crop report forecast 1957 flaxseed production at 41,210,000 bushels, as of August 1, compared with 1956 production of 48,712,000 bushels, and 1946-55 average of 38,627,000 bushels.

Minneapolis—Strength persisted in cash flaxseed market, bids up additional 7c. a bushel to $3.24, spot and to-arrive, basis Minneapolis. Trading basis alternated between a flat price and 6c. under Minneapolis September. Trading in the cash market was at a standstill following the increases. Sharp advances in futures were a bullish influence, Minneapolis September up 13c. while Winnipeg October soared 21¼c. Crushers were hesitant to follow the advances, plants busily crushing supplies purchased from the government for export of the oil. News of virus damage to growing crop sparked strength in futures

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1956-57	1955-56	1956-57
Past week	323,750	100,800	164,500
Since Sept. 1	31,419,350	25,463,800	4,771,500

Peanut—Crude was sold at 13⅞c. per pound tankcars f.o.b. mills. Refined was quoted at 17½c. per pound, tankcars, New York, prompt delivery due to increased price differential. The government last week offered peanuts to make 25 tankcars oil.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, August 9, follow:

	Sales	High	Low	Close
		Cents per pound		
Sept.	2	11.36	11.30	11.35@11.40
March	1	11.36	11.36	11.35@11.45

Total sales, 3 contracts.

Soybean — Buying interest lagged but market remained steady with beans. Light sales of crude took place at 13⅜c. per pound, tankcars, Decatur, for prompt shipment. Refined salad quoted at 14½c.

Oils, Fats and Waxes

per pound, tankcars, New York, prompt delivery.

Export declarations for crude and refined soybean oil in June were reported at 60,403,950 pounds by the Census Bureau.

Department of Agriculture forecast 1957 soybean crop at 428,356,000 bushels, against the final 1956 production of 455,869,000 bushels, and 1946-55 average of 271,689,000 bushels.

Tung—Market remained firm, with scattered sales at prevailing quotations. Buyers and sellers remained on the sidelines awaiting government action on the placing of import duty or quotas on foreign oil. Tankcars were maintained at 23¾c. per pound, New York basis. Drums were unchanged at 25¼c. to 25½c., as to quantity.

Miscellaneous

Cocoa Butter—Market closed stronger and advanced to 76c. to 80c. per pound as to quantity.

Copra—Shipments were stronger and advanced to $162.50 per ton, c.i.f. Pacific coast, prompt, following trading at $157.50. Offers were scarce.

Fats and Greases

Greases—Steady tone prevailed despite light trading. Offers were limited and firmly held. Yellow greases was sold at 7¾c. and 7⅞c. per pound, tankcars, delivered, depending upon acid content. Choice white ranged from 9½c. to 9⅝c. per pound, same basis.

Lard—Market trend continued downward and prices dropped fractionally. Trading was quiet. Cash lard was lower at 12.75c. per pound, drums, Chicago.

Oleo Oil—Extra was quiet and nominal at 19½c. per pound, drums as to seller. Oleo stearine was steadier and ranged from 13¾c. to 14c., same basis.

Tallow—Scarcity of offers due to sold up production kept this market in a firm position. Trading was moderate. Large buyers absorbed light offers of bleachable fancy at 8½c. per pound, tankcars, delivered, with trading also at ⅛c. higher. Prime was maintained at 8¼c. per pound; special, 8c. and No. 1, 7⅞c., same basis. Export business was reported limited. Guaranteed fancy was quoted at 10c. per pound, drums, f.a.s. with bids at ⅛c. less.

Cake and Meal

Cottonseed Meal—Trading in new crop meal was fairly active on the basis of $59.50 per ton sacked, Alabama-Georgia area for last half August and first half September. Prices were higher. Meal, 41 percent was quoted at $57 per ton, sacked Memphis.

Linseed Meal—Prices lifted $1.50 per ton. Trading fairly active before the advance.

Minneapolis—Market turned strong in reversal of recent trend and prices were $1.50 higher. Moderate quantities for nearby needs were sold ahead of the advance. Re-sale supplies were available at 50c. under crushers' quotes. Extracted meal, 34 percent protein, was quoted at $45.50 a ton, bulk, in carlots, f.o.b., Minneapolis, for the last half of August, September shipment was at $48, and October-November at $50. Expeller meal, 32 percent, was steady at $49.50 for August and $51.50 for September-December.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	12,720,000	9,240,000
Since Sept. 1	593,440,000	696,010,000

Peanut Meal—Prices were slightly stronger due to fairly good export demand and some increase in domestic business. The government last week released peanuts for crushing to produce about 1,500 to 2,000 tons of meal. Forty-five percent protein old process was sold at $47. per ton sacked and solvent $44. per ton f.o.b. Alabama-Georgia points for August-September.

Soybean Meal—Prices continued upward reaching new seasonal highs. Leading the advance were old crop options. Active trading occurred in most sections. Demand tapered off from the peak, but quotations were held at $51 to $51.50 per ton, unrestricted, bulk, Decatur.

Waxes

Trading in carnauba wax was less active than the previous week, but the market remained firm at the advance for most grades and reflected the strength of the Brazilian market. While business slackened, consumers increased demand for delivery against former orders. No. 3 Ceara crude was maintained at 72c. to 74c., per pound, spot as to quantity and Parnahyba, 74c. to 76c., same basis. Yellows were unchanged and steady. No. 1 Ceara was maintained at $1.37 to $1.39 per pound and Parnahyba, 2c. per pound more.

GOOD USED EQUIPMENT
Podbielniak SS Centr. Extractor.
Peerless SS Pumps with XP Motors.
Kinney DVD Vacuum Pump, 10 H.P.
I.R. Pump, SS, with 15 HP XP Motor.
Top Entry 2 Speed Mixer, 2" Shaft TEFC 2 2/3 HP Motor, w/switch.
Pebble Mill. 6x5, Jacket. 20 HP.
Large stock of Paint and Chemical Equipment including Mills, Filters, Plain and SS Tanks, Mixers, XP Lights, Switches and General Factory Supplies.
TO BUY OR SELL—TRY
General Equipment & Trading Co.
2633 W Grand Ave. Chicago 12, Ill.
Phone: ARmitage 6-8050

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL-SOYABEAN MEAL
Export Codes: ABC 5th, BENTLEY'S JUNIOR PEERLESS
Cable Address: BRODE
Phones: L. D. 271 — Local 38-2544
Teletype No. ME-260
THE BRODÉ CORPORATION
P. O. Box 700 1012 Falls Building
MEMPHIS, TENNESSEE

SUN BLEACHED
Beehive Brand BEESWAX
• FINEST QUALITY
• GUARANTEED PURE
WILL & BAUMER CANDLE CO., INC.
Dept. OP-8 Established 1855 Syracuse, N. Y.
Spermaceti Ceresine Red Oil Glycerine Stearic Acid
WARRANTED PURE BEES WAX

Croda INC.
Chemical Manufacturer
15 E. 26th Street • New York 10, N.Y.
MU 3-3089
NEW YORK LONDON MILAN
SUPERFINE COSMETIC LANOLIN USP
'HARTOLAN' WOOL WAX ALCOHOLS BP
POLAWAX SELF-EMULSIFYING WAX
'FLUILAN' LIQUID LANOLIN
'PROTANAL' Sodium ALGINATE
'CRODACOL' CETYL, STEARYL, OLEYL ALCOHOLS

QUAKER STATE "SUPERFLEX"
a complete line of
MICROCRYSTALLINE WAXES
For More Details, Call or Write
WAX SPECIALTIES DEPT.
QUAKER STATE OIL REFINING CORP.
OIL CITY, PA.

Since 1852
THE STANDARD OF EXCELLENCE IN ALL REFINED NATURAL WAXES
BEESWAXES — OZOKERITES — CERESINS
MONTAN WAXES — JAPAN WAX SUBSTITUTES
MICROCRYSTALLINES — PALM WAXES —
IMPORTED SYNTHETIC WAXES
Specialty Waxes to Meet Individual Requirements
KOSTER KEUNEN
SAYVILLE, LONG ISLAND, N. Y.
SAYVILLE 4-0400-4-0401

WAXES for every purpose
CONCORD CHEMICAL CO., Inc.
CAMDEN, NEW JERSEY WOodlawn 6-1526
• Carnauba Replacements
• Japan Replacements
• Microcrystalline
• Specialty

WAXES
Importers and Refiners
CARNAUBA • OURICURY
CANDELILLA
Crude • Refined • Bleached • Flaked • Powdered
MAMARONECK REFINED BRAND
Vegetable Waxes
CERESINS — OZOKERITES
Palm Waxes — Resin Blends
Compounds and blends made to your specifications
CERITA WAXES
M. ARGÜESO & CO. INC.
441 Waverly Ave., Mamaroneck, N.Y.
Mamaroneck 9-4746 • Cable: MARGUESO • Established 1908

GROCO 8
DISTILLED
RED OIL (OLEIC ACID)

Titre	8° —	10°C.
Cloud Point	46° —	49°F.
Color 1" Lovibond Red	2 max.	
Color 1" Lovibond Yellow	15 max.	
Unsaponifiable	1.5% max.	
Saponification Value	198 —	203
Acid Value	197 —	202
% F.F.A. as Oleic Acid	99 min.	
Iodine Value (WIJS)	93 max.	
Refractive Index 50°C. (Average)	1.4495	

Send for samples and free booklet "Fatty Acids in Modern Industry"
a. gross & COMPANY
295 Madison Ave., New York 17, N. Y.
Factory Newark, N. J.
Distributors in principal cities
Manufacturers Since 1837

MUTUAL BICHROMATES

Sodium Bichromate
Potassium Bichromate

MUTUAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 BROADWAY, NEW YORK 6, N. Y.

DRY COLORS — DYESTUFFS
IMPORT *EXPORT*
FEZANDIE & SPERRLE 205 Fulton Street NEW YORK 7
Telephones: COrtlandt 7-1460-1461 Cable Address: "Fezan," N. Y.

METOL
Monomethylparaminophenol Sulfate
Registered Trade Mark
TANNIC ACID GALLIC ACID
(U.S.P. and Technical Grades)
PYROGALLIC ACID
(U.S.P. and Technical Grades)
ZINSSER & COMPANY, INC.
SUBSIDIARY OF
THE HARSHAW CHEMICAL CO.
HASTINGS-ON-HUDSON, NEW YORK
Cleveland • Chicago • Cincinnati • Detroit • Houston • Los Angeles • Philadelphia • Pittsburgh

keep your reference shelf up to date with . . .

INDUSTRIAL FERMENTATIONS
Edited by LELAND A. UNDERKOFLER, Ph.D., and RICHARD J. HICKEY, Ph.D.
Unique symposium on industrially important processes for fermentative production of drugs and chemicals

CONTENTS FOR VOLUME I

Alcoholic Fermentation of Grain. Alcoholic Fermentation of Molasses. Alcoholic Fermentation of Sulfite Waste Liquor. Production of Alcohol from Wood Waste. The Brewing Industry Commercial Production of Table and Dessert Wines. Glycerol. Commercial Yeast Manufacture Food and Feed Yeast. The Butanol-Acetone Fermentations. Lactic Acid. The Citric Acid Fermentation. Gluconic Acid. Fumaric Acid. Itaconic Acid. Acetic Acid—Vinegar 565 PAGES • 1954 • $12.00

CONTENTS FOR VOLUME II

Ketogenic Fermentation Processes. Fermentative Production of 2,3-Butanediol. Fungal Amylolytic Enzymes. Microbial Enzymes Other than Fungal Amylases. Production of Riboflavin by Fermentation. Production of Vitamins Other than Riboflavin. The Penicillin Fermentation. Streptomycin. Other Antibiotics. Miscellaneous Fermentations. Lactic Acid Fermentation of Cucumbers, Sauerkraut and Olives. Selection and Maintenance of Cultures. Cultural Variation and Genetics. Fermentations in Waste Treatments. 575 PAGES • 1954 • $12.00

RAPID DETECTION OF CATIONS
By Gaston Charlot, Denise Bezier and Rolland Gauguin
Translated by Ralph E. Oesper

This first English translation of a successful French text describes very efficient specific qualitative methods for the analysis of metals and alloys.

The goal is to detect each metal in the presence of one-hundred to one-thousand times larger quantities of any other metal or combination of metals.

The identifying tests are specific and selective. Separations are kept at a minimum, when they could not be eliminated, every effort has been made to make them as quantitative as possible

In addition to special identifying tests for each metal ion, selective reactions are also included for determining the absence of an entire group of elements. Such eliminating tests are effective time savers 92 PAGES • 1954 • $3.00

POCKET BOOK OF CHEMICAL TECHNOLOGY
V Stannett, Ph.D., *and* L. Mitlin, M.A.

This handy volume will be valued by chemists and chemical engineers as a time saver It contains essential information frequently needed by chemical technologists in less bulky form than the very complete handbooks.

Its approach is unique in that it includes both chemical and chemical engineering data. The material is presented in such a form that it should be useful to specialists, beginners, students, and those technical workers in the various chemical industries who have no formal educational background The book is also intended for bench and plant workers and those who are engaged in the supervision of chemical processes, both in the laboratory and in chemical plants.

Details of radioactive isotopes and labeled compounds have been listed to stimulate interest in this field. 238 PAGES • 1954 • $4.75

CHEMICAL ENGINEERING OPERATIONS
Frank Rumford, Ph.D.

The book gives a clear picture of the basic principles of the operation of chemical plants It discusses the most important processes used in the chemical industries. It describes and illustrates the principal types of apparatus for carrying out each process.

The theoretical aspects of chemical works procedures are covered and their mathematical foundations given. Considerable space is devoted to the practical phases of the subject. Processes and equipment are evaluated from the viewpoint of efficiency and economy Illustrative examples are listed for every operation treated, including the calculation of results and graphical presentation.

376 PAGES • ILLUSTRATED • 1952 • $7.50

Send Your order with remittance to: **SCHNELL PUBLISHING COMPANY, Inc.**
30 Church Street New York 7, N. Y.

Textile, Leather Chemicals

Consumers of textile and leather chemicals continued to limit purchases to actual requirements last week. Interest in later needs was reported slow. Sodium hydrosulfite will be reduced one half cent per pound for carlots and truckloads, September 1, while less truckloads will be one half cent higher. Other chemicals were quotably unchanged. An easier tone prevailed in tanning materials due to the continued lack of buying interest. Valonia recently was reduced and last week myrobalans for shipment also were dropped sharply. Other materials were inactive and more or less nominal. In sizing materials, prices were maintained at former levels.

Shoe production in June totaled 45,372,000 pairs, an increase of 1.3 percent over June a year ago, according to the Census Bureau. In the major categories, the largest gain over last June took place in youths' and boys' shoes while house slippers showed the sharpest decline. For the first half of 1957 output totaled 305,690,000 pairs, only 0.5 percent less than in the same period of 1956 when 307,160,000 pairs were produced. Shoes produced with leather soles in June represented 32.5 percent of the total and with all leather uppers, 79.7 percent. The average factory value per pair of shoes shipped in June was $3.52 as compared with $3.43 in May and $3.53 in June, 1956.

Production of shorn wool in 1957 was estimated at 226,021,000 pounds by the Department of Agriculture. This is 3 percent less than last year's production of 232,126,000 pounds and 4 percent less than the 1946-55 average. The decline in 1957 output reflects a 2 percent drop in the number of sheep on farms and also a decline in the average weight of fleeces as compared with last year. Wool production in Texas, the leading sheep state, was reported at 37,486,000 pounds, or 12 percent below the 1956 production.

Output of cotton cloth processed by textile finishing plants in the first half of 1957 dropped to 3,903,000,000 yards, about 7 percent below the 4,205,000,000 yards turned out in the first half of 1956 it was reported by the National Association of Finishers of Textile Fabrics.

The production decline flattened out somewhat in the second quarter, and output of cotton finishing plants was 1,888,000,000 yards, about 5 percent less than in the same 1956 period. First-quarter production, at 2,015,000,000 yards, had been almost 9 percent below the 2,214,000,000 yards processed in the same quarter last year.

Price Trends

Advanced
None

Reduced
Myrobalans, Bombay, $6 per ton
genuine J1's, $8 per ton
crushed, $7 per ton

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug.10, 1956
103.50	104. 85	106.27	107.44

For Current Prices See Page 9

Chemicals

Bichromates—Production of sodium bichromate and chromate in May amounted to 9,649 tons, against 9,860 tons in April and 9,954 tons, May, 1956, was reported by the Census Bureau. Stocks at producing plants in May totaled 9,993 tons compared with 10,262 tons in April.

Sodium Hydrosulfite—Effective September 1 prices will be reduced ½c. to 23¾c. per pound, drums, for carlots and truckloads, while less than truckload quantities will be raised ½c. to 24¾c. to cover increased cost of handling. Production in May totaled 2,139 tons against 2,111 tons in April and 2,649, May last year. Stocks at producing plants amounted to 1,991 tons in May and 1,953 tons in April.

Sizing Materials

Albumin Egg — Trading was limited, confined to actual needs. Flake was unchanged at $1.14 to $1.16 per pound, and powder, $1.18 to $1.20 per pound, spot, according to quantity and seller. Technical was in tight supply and maintained at $1.08 to $1.10 per pound, same basis.

Corn Dextrin—Small lots were moved for immediate delivery. All grades were quotably unchanged and steady. Gum was quoted at $9.33 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.07; dark canary, $9.17 and white, $8.91, same basis. Smaller lots were 15c. higher.

Potato Starch—This market was quiet, but steady. Demand was confined to immediate needs from warehouse, while carlot sales were slow. Carlots were unchanged at 6¼c. per pound, f.o.b. mills, Maine, less ¼c. for shipment below the Mason Dixie line and 6½c., Idaho mills, less ½c. to eastern points. Stocks on spot were held at 8¼c. to 9¼c., warehouse, as to quantity.

Tapioca Flour—New crop Siamese flour was offered on the basis of 5.95c. per pound, carlots, exdock for medium and 6.3c. for first quality, September forward shipment. Buying interest was reported spotty. Old crop was scarce and sold up. Brazilian flour for shipment ranged from 9¼c. to 9½c. per pound, carlots, exdock, with trading reported at this level.

Tanning Materials

Leather production in June was slightly better than the previous month according to Tanners Council. Cattlehide and kip sides leathers output amounted to 2,159,000 hides and kips in June against 2,114,000 in April; calf and whole kip skins, 800,000 against 744,000; goat and kid skins, 2,005,000 against 1,959,000 and sheep and lamb skins, 2,453,000 against 2,369,000.

Chestnut Extract—Market was quiet and unchanged. Solid extract, 60 percent tannin was offered at 8½c. per pound, exdock, plus duty, prompt shipment, and 68 percent, 9.59c., same basis.

Cutch — Buying interest was reported spotty. Shipments were maintained at 7½c. per pound, exdock, plus duty.

Myrobalans—Shipments were easy and lower as a result of slow consuming interest. Genuine J1's were reduced to $60 to $62 per ton, exdock, prompt shipment; crushed J1's, $75 to $76 and Bombay, $55 to $56, same basis.

Quebracho Extract—While trading was slow, offers for shipment were named at former levels. Solid clarified was held at 10.7429c. per pound, and ordinary, 9.8035c. per pound, carlots, exdock, plus duty for prompt shipment.

Valonia — Quiet demand has unsettled replacements for beards and cups, while extract was steadier. Beards were quoted nominally at $90 per ton, exdock and cups, $65 to $67, same basis. Extract was reported scarce and held at 11c. per pound, exdock, plus duty.

Wattle — Consumer interest continued slow and the market was a nominal affair. Fair average bark was quoted at $80 per ton, exdock, prompt shipment, and merchantable, $75 per ton, same basis. East African extract, 60 percent was held at 8.275c. per pound, exdock, plus duty and South African, 8.4c. per pound, same basis.

Brazilian production of wattle tannin has increased substantially in the past few years, according to U. S. Consulate, Port Alegre.

Climatic conditions for growing wattle trees are favorable particularly in two states, Rio Grande de Sul and Santa Catarina. Attempts to grow wattle trees in other states appear to have been unsuccessful.

Rough estimates place the growth of 60 million trees in the state of Rio Grande de Sul and about 5 million trees in the state of Santa Catarina. Of this total about 7 million trees are used annually for tannin production and firewood. Tannin production is roughly estimated at 21,000 metric tons a year which represents about 60 percent of the country's entire requirements. Reportedly, five tannin producing factories are in the state of Rio Grande de Sul.

Prices for bark and wood are considered highly satisfactory. Lack of capital, however, precludes further expansion of the industry for the time being.

LIQUIDATION

TRENTON CHEMICAL CO.

Trenton, Michigan

EVAPORATORS & STILLS

1—Swenson 5 Body, Quadruple Effect, forced circulation and film type Evaporator, 12,975 sq. ft. heating surface (complete details on request).
1—A. H. Arnold & Co. 6' dia. Evaporator, Type 316 Stainless Steel, rapid circulation film type (complete details on request).
1—Arthur Harris Co., Type 316 Stainless Steel Evaporator 3' dia. x 8½' high (complete details on request).
3—Copper Beer Stills 42", 48" and 60" dia. with 3 Copper Rectifying Columns 48" and 54" dia.

DRYERS

3—American Double Drum Dryers 42" x 120" complete.
3—Louisville Steam Tube Rotary Dryers 6' dia. x 50' complete.
1—Stainless Steel Hot Air Rotary Dryer 20" dia x 9' long.
1—Louisville Dewaterer 36" dia., 8 Roller w/bronze screen.

TANKS Stainless Steel

3—12,000 gal. Vertical Closed Tanks 12'6" dia. x 12'6".
2—5,000 gal. Vertical open Tanks 11' dia. x 8'.
3—3,200 gal. Vertical open Tanks, 8' dia. x 8'.
1—2,000 gal. Vertical open Tank, 8' dia. x 5', jacketed, with agitator.
1—1200 gal. Vertical open Tank 6' dia. x 6'.

RUBBER LINED

1—5,500 gal. Rubber Vertical Closed Acid Receiving Tank 10' dia. x 9'.
1—2,000 gal. Rubber Vertical Closed Tank 7' dia. x 7' with agitator and drive and 2" dia. Hastelloy "C" coils—12 rows.

COPPER

16—Copper Vertical, Closed Tanks from 1100 gal. to 12,000 gal.

ALUMINUM

1—10,000 gal. Aluminum, Horizontal Storage Tank 10' dia. x 16', ½" shell.

STEEL

1—30,000 gal. Vertical closed, 16' dia. x 20'.
2—20,000 gal. Vertical closed, 11' dia. x 25'.
5—40,000 gal. Vertical, 12' dia. x 50' high.
1—12,000 gal. Vertical, 9' dia. x 25' high.
32—22,000 gal. Vertical, 16' dia. x 18'.

CENTRIFUGALS

1—Bird Solid Bowl 36" x 50" steel, continuous, 25 HP.
1—Bird 18" x 28" Stainless Steel, Solid Bowl, continuous.
1—Bird 40" Suspended, rubber lined, 25/10 HP.
1—AT&M 42" dia. Suspended, Stainless Steel Perforated Basket, 25/7½ HP.
1—AT&M 42" dia. Suspended, Stainless Steel Perforated Basket, 40 HP.
2—Tolhurst 40" Suspended, rubber covered, perforated, 10 HP.
2—Tolhurst 40" Suspended, Steel Perforated Basket, 15 HP.
1—36" AT&M rubber covered, Perforated Basket, center-slung, 7½ HP.
2—Sharples #16 Super-Centrifuge, Steel and Monel, 2 HP motors.

CENTRIFUGAL PUMPS Stainless Steel & Rubber Lined

1—Lawrence 3" Vertical 316 Stainless Steel 20 HP motor.
1—Moyno Pump Type CDR with 10 HP motor.
1—LaBour 3" x 3" 5 HP motor, stainless.
1—LaBour 2" x 3", 7½ HP motor, stainless.
5—LaBour 1½" x 1½" 7½ HP motor, stainless.
2—Olivite 3" x 2", 7½ HP motor, rubber lined.
2—Olivite 2" x 1¼", 1½ HP motor, rubber lined.
2—Wilfley 4" Haveg Lined.

BRONZE

12—Bronze Centrifugal Pumps 1" to 4".

CAST IRON

20—Centrifugal Pumps, cast iron, 1" to 10" with 1½ to 125 HP motors.

MISCELLANEOUS

Boiler Plant: 4 Boilers, 298 to 744 HP; Motors; Compressors; Agitator Drives; Copper; Stainless Steel and Steel Pipe, Valves and Fittings; 2 Rectangular Bins, 20' x 20' x 30' and 14' x 14' x 35'; Bucket Elevators; Screw Conveyors; Hammer Mills; Allis Chalmers 3' x 8' Screens; 5 Steam Turbines from 15 to 125 HP; Illco-Way Water Softener, 100 gph; Permutit Water Softener, 12,000 gph.

Write or Phone for Detailed Circular

Representative on Premises for Inspection

TEXAS OFFICE: 4101 San Jacinto St., Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
2401 Third Ave., New York 51, N.Y. Tel.: GYpress 2-5783

BRILL EQUIPMENT CO.

CENTRIFUGES

5—Bird 32" x 50", 316 S.S. solid bowl, continuous, fume tight, 60 HP motors, New 1953.
2—Bird 18"x28", 36"x50" steel, continuous, solid bowl.
2—Bird 18" x 28", 24" x 38" Stainless Steel, Continuous, solid bowl.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
2—Tolhurst 40" Suspended Steel Perforated 15 HP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Tolhurst 32" Suspended, 304 S.S. perforated basket.

KETTLES, REACTORS, CONDENSERS, EVAPORATORS, TANKS

1—Artisan 450 sq. ft. Stainless Steel, Single Effect Evaporator, complete with piping, receiver, separator and condenser.
1—1,000 gal. nickel clad, jacketed, agitated Reactor.
1—600 gal. 316 S.S. jacketed, agitated Reactor 200# internal pressure, 90# jacket pressure.
2—Pfaudler 250 gal. glass lined, jacketed, agitated Reactors.
1—Pfaudler 100 gal. 304 S.S. jacketed, agitated, Reactor, 75 psi.
3—3000 gal., 304 S.S. jacketed, agitated Tanks 9'x7'.
1—9,400 gal. 316 ELC, Horizontal Tank, 8½' dia. x 19'.
1—12,000 gal. rubber lined Horizontal Tank, 10'6" x 20'.
1—10,000 gal. Aluminum Tank 10' x 16', ½" shell, 25# W. P.
1—3500 gal., 304 S.S. Horizontal Tank 5'6"x16'.
5—1000 gal. Stainless Steel Clad, Vertical Storage Tanks.
1—Langenskamp 6'x5', 316 S.S. Tank.
4—Stainless Heat Exchangers, 1665, 1220, 947 and 500 sq. ft.
4—Karbate Heat Exchangers, 70 and 26 sq. ft.

DRYERS

4—Devine Vacuum Shelf 17, 16 and 12—40" x 43" shelves with Condensers.
3—Devine Double Door Vacuum Shelf 17 and 20—59"x78" shelves.
4—Drying System, Inc. steam heated Tray Dryers, 95 sq. ft.
2—Buflovak 42" x 120" Atmospheric Double Drum.
2—Devine 4'x9' Atmospheric single drum.
1—Hersey 1½'x12' Rotary Hot Air 304 S.S. with steam coils.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
3—Bartlett & Snow Rotary 6'x30', 7'x30'.
1—Christie 70" x 40' Hot Air Rotary Dryer, ⅜" shell.
2—Link Belt 5'2" x 20', 6'4" x 24', Steel Roto-Louvre Dryers.

MIXERS

1—Baker Perkins No. 16 TRM, 150 gal., jacketed sigma blades, Vacuum, 60 HP motor.
1—Baker Perkins #15USE, 100 gal. jacketed, Stainless Steel, Vacuum, 75 HP.
1—Baker Perkins No. 15 VUMM, 100 gal. jacketed, dispersion blades, 100 HP motor.
5—Day "Cincinnatus" double arm 250 and 100 gals.
2—Porter 4½ gal. jacketed, sigma blade.
1—Baker Perkins 2 gal. 304 S.S. sigma blades, 2 HP motor.
1—Baker Perkins 1 gal. 304 S.S., jacketed, sigma blades, 2 HP motor.
1—Patterson 6' dia. Steel Conical, 15 HP motor.
5—Steel, jacketed, Powder 50, 225 and 350 cu. ft.
1—Day D10, 304 S.S. Powder Mixer, 7½ HP motor.

FILTERS

1—Oliver 8' x 10' Monel Rotary Vacuum.
1—Eimco 18" x 12", 316 S.S. Rotary Vacuum.
1—Oliver 8'x10' Monel Rotary Vacuum.
2—Sparkler 33-S-28 Pressure Filters, 150 sq. ft., 304 S.S.
1—Sparkler 14-D-4 Pressure Filter, 3.2 sq. ft., 304 S.S.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
2—#7 Sweetland Filters, 20 leaves, 4" centers.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing

MILLS

1—International 6'x7' porcelain lined Pebble Mill, 30 HP motor.
3—Patterson, Abbe, 6'x8' unlined Ball Mills.
2—Abbe 5'x6' and 4'x5' Silex-lined Pebble Mills.
1—#2DH Mikro Pulverizer, 10 HP motor.
1—National 6"x12" Two Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven. NEW.
1—Williams 30 HP Ball Bearing Hammermill.

MISCELLANEOUS

3—25 ton Freon Refrigerating Units.
10—Orville Simpson Double Deck Rotex Sifters, 60"x84", 40"x84".
3—Robinson Gyratory Sifters 30"x104", triple deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
10—Nash Vacuum Pumps H7, H6, H5, L5, H4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 5".

Partial List of Values — Send for News Flash!

TEXAS OFFICE: 4101 San Jacinto St., Houston 4, Texas — Tel: Jackson 6-1351

BRILL EQUIPMENT COMPANY
2401 Third Ave., New York 51, N.Y. Tel.: GYpress 2-5783

PERRY EQUIPMENT CORP.

GOOD EQUIPMENT IN STOCK

FILTER PRESSES
Plate & Frame

1—Stainless St., 12", 3 ch. Sperry.
1—Aluminum, 15" Sperry, 29 ch. 1-eye, open dely.
1—C.I. 7", 21 ch. 2-eye, cl. dely.
2—C.I. 24" Sperry, 30 ch., 2-eye, cl. dely.
2—C.I. 30" Shriver, 29 ch., 2-eye, open dely.
1—C.I. 30" Shriver, 35 ch., 1-eye, open dely.
2—C.I. 30" Shriver, 50 ch., 1-eye, open dely.
1—C.I. 30" Sperry, 36 ch., 1-eye, open dely.
1—C.I. 30" Shriver, 36 ch., 2-eye, open dely.
1—C.I. 30" Sperry, 46 ch., 3-eye, visib. cl. disch.
1—C. I. 36" Shriver, 20 ch., 2-eye, cl. dely.

FILTERS—Pressure Leaf

1—Niagara #510-28 Type 316 Stainless Steel, 21 leaves, 510 sq. ft.
3—Sparkler #33-S-28, T304 St. St. plates, 151 sq. ft., steel tank.
1—Sweetland #12—72 leaves.
1—Sweetland #5—20 leaves.
1—Industrial 18 x 48-RR, Rubber lined, 60 sq. ft., rubber leaves.
1—Klein #2 Type 304 Stainless Steel, 11 leaves, 97 sq. ft., with closed feeder.
8—Bowser, Butler, Industrial & Klein—from 7 sq. ft. to 140 sq. ft.

FILTERS — ROTARY VACUUM

1—Oliver 5'3" D x 3' F, Precoat, pressure housing, rubber lined.
1—Oliver 5'3" D x 8' F, Precoat, Steel. Unused.
1—Feinc 6'6" D x 6' F, String Discharge, steel.
2—Eimco 10' D x 12' F, rubber covered.
3—Sweetland—#12, #7, #5.

FILTERS — MISCEL.

2—Sharples 16V Super Centrifuges, Stainless Steel.
5—Louisville 36" wide 8-Roll Continuous Filters.
3—Adams #WJR-1, T304 Stainless Steel.
2—International Single Disc, T304 Stainless Steel, #3—24" dia. and #5—33" dia.
1—Alsop SD-6-WR-10, Jacketed, T304 St. St.
1—Star 15 plate Bronze Filter.
1—Enzinger-Union 26 plate Brass Filter with Packer.

MISCEL.

2—Louisville Rotary Steam Tube Dryers: 6' D x 30' L; 6' D x 40' L.
1—Lee 100 gal. St. St. Jktd. Kettle with double motion agitator.
1—G. E. Motor Generator Set—250 V, 15 KW DC; 20 HP, 3/60/220/1200 motor.
1—Cherry Burrel 400 GPH Homogenizer, St. St. Sanitary Viscolizer, 15 HP.
1—Marco Flow-Master AC-500 Homogenizer, 500 GPH, St. St., 7½ HP.

PERRY EQUIPMENT CORP.
1407 N. SIXTH STREET · PHILADELPHIA 22 PA.
Phone (Phila.) POplar 3-3505

FOR SALE

40" SS Type 347 Bird Suspended Centrifuge perforated basket 30/ 7½ HP A Frame.

18" x 28" Bird Cont. Centrifuge SS 304 Conical bowl V belt to 10 HP motor.

54" x 70" Bird Cont. Centrifuge with 100 HP motor used only 10 hours.

Stokes DD2 Tablet Presses (2)

24" x 20' Swenson Crystallizers (3).

6'4" x 50' Column 28 Trays 150 psi at 500°F. NEW.

2790 Sq. Ft. Ross Condenser—Admiralty tubes 100 psi.

PARTIAL LISTING ONLY
SEND US YOUR INQUIRIES

502-16 Roto-Louvre Dryer with oil burner blowers, controls and feed bin.

705-24 Roto-Louvre Dryer with aerofin coils, blowers, controls and screw feeder.

Raymond 5 roll Low Side Mill.

13,000 gal. Ammonia Tank ASME 7'6" x 40'9" 220 psi.

HEAT & POWER Co., Inc.
PROCESS EQUIPMENT DIVISION
60 EAST 42nd ST. NEW YORK 17, N. Y. MUrray Hill 7-5280
310 THOMPSON BLDG. TULSA 3, OKLAHOMA Diamond 3-4890

STEIN EQUIP'T
OFFERS

DRYERS AND KILNS
1—Allbr. Neil 4x9 Atmos. Drum Dryers.
Stokes 2'x6' Rotary Vac. Dryer.
1—Buffalo Vac. Drum Dryer, 24"x20".

CENTRIFUGALS AND CENTRIFUGES
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter, 12 Stainless covered leaves & other sizes. Oliver Filters.
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Ertel 6 & 10 disc Filters 12¼" dia.

KETTLES AND TANKS
3—100 gal. Stainless Clad Jack. Kettles.
Pfaudler 200 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack. CI Vac. Kettle.
2—Impreg. Units 30" & 36" dia. complete.
6—Jack. Steel Kettles up to 3000 gals.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead Lined Kettle.
Stainless, alum., copper, glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS
4—Mikro Pulverizers, #2TH, #4 & Bantam.
Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42", 4'x5'. Also jar mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Bauer 24" Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ HP Colloid Mills.

MIXERS, SIFTERS & SCREENS
Day Imperial 75 & 150 gal. Jack. Mixers.
Day Jumbo, 700 gals., Mixer.
Lancaster 8' dia. Vert. Mixer, 25 HP.
Kent 3 HP, continuous Dry Mixer.
Baker Perkins, 50 & 100, gal. Jack. Mixers.
Blystone 3000# horiz. Spiral Mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm Mixers.
Read 80 qt. vert. Mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS
Colton ½" & 1" single punch & rotary Tablet Machines & other sizes.
Anderson & French Oil Expellers.
3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine, Buffalo, Stokes Vac. Pumps.
Boilers—Gas & Oil, conveyors & Elev.
Soap Machinery for Toilet, Laundry, etc.

PARTIAL LISTING. WRITE FOR BULLETIN. WE BUY YOUR SURPLUS MACHINERY & PLANTS

STEIN EQUIP'T CO.
107 EIGHTH ST., BROOKLYN 15, N. Y.
STERLING 8-1944

BETTER, FASTER BLENDING WITH the NEW FALCON

SEND FOR BULLETIN

- Approved SANITARY by Municipal Authorities
- Unique Double Ribbon For Faster efficient Mixing
- All Sizes usually in Stock in Stainless or Mild Steel
- Requires Less Power per load
- Smooth Rounded Interior No projections to retain material
- Ribbon Assembly quickly removable for cleaning
- Jackets Available for Heating or Cooling
- The FALCON is competitively priced

THE FALCON MANUFACTURING DIV.
of the
FIRST MACHINERY CORP.
211 TENTH STREET, BROOKLYN 15, N. Y.

FMC CALLS YOUR SPECIAL ATTENTION TO *"BLUE CHIP"* EQUIPMENT UNITS RARELY OFFERED ON THE REBUILT EQUIPMENT MARKET

Mojonnier Stainless Steel Vacuum Pan; 6' x 12' with S.S. Condenser Coil.
Four Stainless Steel Horizontal Tanks; 6' x 34'; 7000 gal. Dished Heads.
Blaw Knox Stainless Steel Resin Still or Autoclave; 7'6" x 7'6"; Jacketed.
Two Stainless Steel 5000 gal. Pressure Tanks; 10' x 6' with Agitators.
A. O. Smith Type 347 Stainless Autoclave; 1500 lb. ASME; 1200 gal. Agitated.
Lancaster Stainless Lined Rotary Reactor; 1700 gal. 300 PSI ASME; 50" x 17'4".
Western Precipitation Holo-Flight Desolventizer or Chlorophyll Extractor.
2 Plastic Extruders Royle No. 3 and NRM 2½" Screw-Oil Heated-Controls.
Stokes Rotary Tablet Presses; RB2; BB2; RD3; DD52; Colton No. 10-35.
Baker Perkins (W. & P.) Heavy Duty Double Arm Jktd. Mixers to 300 gal. sizes.
J. H. Day Cincinnattus 1000 gal. Stainless Steel Mixer; Jktd., 75 HP motor.
Readco 750 gal. Double Sigma Arms Jacketed Mixer with Vac. Bowl; 200 HP.
Werber & Pfleiderer 1200 gal. Universal Mixer; Sigma Arms; Jktd., 150 HP.
Bird Continuous Conical Bowl Centrifugals; 18" x 28" and 36" x 50" Compl.
A. T. & M. 26" Stainless Steel under driven Centrifuge; perforate basket.
Tolhurst 40" Rubber Covered Suspended-Centrifugals with Monel Plows.
Sharples H2 Nozzlejector with 15 HP Explosion Proof Motor; 1000 GPM.
Sharples C27 Super D Hydrator; Type 316 Stainless; 30 HP Expl. Motor.
8 Stainless Steel Heat Exchangers or Condensers up to 1000 sq. ft. surface.
Barnstead Stainless Steel Steam Heated Water Still; 100 gals. pr hr.
Stainless Steel Vacuum Still; 755 gal. 4'6" x 6'; coil heated.
Stainless Steel Jacketed Vacuum Still; 425 gal.; 56" x 50".
Aluminum Bubble Cap Column 60 Plates; 27½" dia. x 36'; 11 Sections.
Double Drum Dryers with Accessories; 28" x 60"; 32" x 72" and 42" x 100".
Raymond 2 Stage Flash Drying Installation in Type 316 Stainless Steel.
Hersey Rotary Gas Fired Counter Current Atmospheric Dryer; 5' x 26'; S.S.
Squier Stainless Clad Rotary Atmospheric Dryer; 30" x 20'; Hexagon.
Stokes Jacketed Rotary Vacuum Dryer; 34" x 10' Model 59 AB; accessories.
American Two Door Jacketed Sterilizers; all sizes up to 36" x 42" x 84".
Rotary Cutters by Abbe, Ball & Jewell, from Lab. Size to Size No. 1-15 HP.
Mikro Pulverizers from Bantam size in Stainless up to No. 4 Model.
Raymond, Williams, Gruendler, Hammer Mills for heavy duty; all purposes.
Fitzpatrick Model K 7 Comminutating Mill in Stainless with 20 HP motor.
Patterson Buhrstone Lined Model D Pebble Mills; 6' x 5' and 6' x 8'.
International Porcelain Lined X24 Pebble Mills with 50 HP Gear Motors.
Gates Tube Mills 5' x 22' with manganese steel liners.
Hardinge Conical Ball or Pebble Mill; 10" x 36"; Silica Block Lining.

SEND FOR OUR COMPLETE POCKET SIZE EQUIPMENT GUIDE for Latest Inventory

TRADE IN PLAN — RENTAL — PURCHASE PLAN

OVER 5000 UNITS IN STOCK

FIRST MACHINERY CORP.
209-289 TENTH STREET, BROOKLYN 15, N. Y.

FRED FIRSTENBERG President
PARKING ON THE PREMISES
PHONE: STerling 8-4672
Cable "EFFEMCY"

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

2—L. O. Koven Steel Jacketed 1000 gal. Kettles with Agitators and Drives.

2—L. O. Koven Steel Jacketed Kettles, 600 gal. capacity.

1—Combustion Engineer Steel Jacketed Autoclave, 1600 gal., complete with Agitator and Drive. W.P. Jacket: 150#. W.P. Shell: 600#. ASME code.

1—Buflovak Stainless Steel Jacketed Reactor, 250 gals.

1—Alloy Fabricators Stainless Steel Jacketed 250 gal. Kettle.

1—Pfaudler Glass-Lined Series R Jacketed Kettle, 500 gals.

2—Steel Vertical Rubber-Lined Storage Tanks, 1000 gals. each. New.

1—Type 347 Stainless Steel Vertical Tank, 9000 gals.

3—Stainless Steel Vertical Tanks, 3000 gals.

2—Sharples Type 316 Stainless Steel Centrifuges, Model #D-2.

2—Vertical Stainless Steel Tanks, 1000 gals.

1—Baker Perkins Ter Meer, Type 316 Centrifuge, Model #HS-24".

1—Tolhurst Rubber-Lined Centrifuge, 20" Basket, Base-Bearing-Type.

1—Mikro #4TH Pulverizer with 60 HP motor.

1—Mikro #2 DH Pulverizer (New).

1—Fitzpatrick Model D Stainless Steel Comminuting Machine.

1—E. B. Badger Stainless Steel Bubble Cap Column, 3' x 7' with 10 trays.

1—Vulcan Type 316 Bubble Cap Column, 3' x 31' with 30 trays.

2—Steel Presure Tanks, 30,000 gal., 200# W.P. ASME code.

1—Vulcan Steel Bubble Cap Column, 42" x 30' with 20 trays, (New).

1—E. B. Badger Steel Bubble Cap Column, 24" x 24' with 15 trays.

1—Davis Engineering Type 347 Stainless Steel Heat Exchangers, 120 sq. ft. ea. (New).

5—Davis Engineering Type 347 Stainless Steel Heat Exchangers, 200 sq. ft. ea. (New).

1—Bird continuous Centrifugal Filter, Model 24" x 38".

1—Sweetland #7 Filter with 20 steel leaves.

1—F. L. Schmidt Rotary Kiln, 8'2" x 132', complete.

10—Sweetland #10 Filters with 22 stainless steel leaves.

3—Niagara Stainless Steel Filters, Models 510-28, #200-36, #26-60-4.

5—Milton Roy Type 316 Stainless Steel Pumps with 5 HP motors, Mod. MD1-108-56-SMIU.

1—Nash Hytor Vacuum Pump, Model L-4, with 5 HP motors.

1—Nash Hytor Vacuum Pump, Model L-4, with 15 HP motor.

1—Baker Perkins, size 16, 150 gal. Type TRM Double Arm, Jacketed Sigma Blade Vacuum Mixer, with 60 HP motor.

1—Baker Perkins Double Arm Dispersion Blade Jacketed Mixer, 100 gal. with 100 HP motor.

4—Baker Perkins Double Arm Sigma Blade Jacketed Mixer, 100 gal.

1—J. H. Day Stainless Steel Double Arm Sigma Blade Jacketed Mixer, 50 gals.

1—J. H. Day Steel Jacketed Double Arm Sigma Blade 75 gal. Mixer.

2—H. K. Porter Double Arm Sigma Blade Jacketed 4½ gal. Mixers with motors.

2—Baker Perkins, Size 4AN2 Laboratory Sigma Blade Mixers.

5—Simpson #0 Intensive Mixers, Type M (New).

2—Howes 40 cu. ft. Rubber-Covered Ribbon Blenders (New).

1—Feinc Stainless Steel Rotary String Filter, 3' x 3', New.

1—Komarek Greaves Briquetting Machine with 50 HP motor.

1—Chicago Bridge and Iron Works Steel Pressure Tank, 18,000 gal., 80# W.P., ASME code.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

ECH SPECIALS

W&P 100 gal. SS Sigma Mixer, 20 HP exp.mtr.
New Pfaudler 1000 gal. Hastelloy Kettle.
AT&M 36" SS Cent. with 15 HP motor.
Gen. American 42"x120" Twin Drum Dryer.
New Pfaudler 3'x6' Glass Reactor.
Pfaudler 125 gal. SS Reactor, Jktd. & Agtd.
2 W & P Jktd. Mixer, 15 gal., 15 HP.
3 Read 18"x48" Vibrating Sifters.
Nash Hytor Vac. Pump #6, 40 HP motor.
Link Belt SS Rotary Dryer, 5'x20'.

New Machinery Div. for New Fabrications
We Buy Complete Plants or Single Units
Tel.: SOuth 8-4451—4452—8782
YOU CAN BANK ON
EQUIPMENT CLEARING HOUSE INC.
111 33rd Street Brooklyn 32, N. Y

EQUIPONOMICS

BLENDER—Ribbon, 1250#, Jacketed
OLIVER VACUUM FILTER—Type 316 s. s. 3'x6'
FILTER PRESSES—30"x30", All s. s- 36-1" Chambers, New
36"x36", 34 Rubber Covered Frames-1½"
FITZPATRICK COMMINUTERS—Model D
TANKS—s. s. 500 Gal, Agit., Vert.
DRYER — Buflovak Double Drum 32"x90"
CENTRIFUGE - Tolhurst 26" Susp. Monel Basket—5 H. P. 2 Speed.
PFAUDLER KETTLE—G/L. Jack., 300 Gal.

BIRD CONTINUOUS CENTRIFUGES
18"x28", 24"x38", 36"x50"
s. s. 316 and Steel

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N. J.
Tel : FUlton 1-1103 4

NEW AND GOOD-AS-NEW EQUIPMENT

1—Stainless Tank #430 Chrome, vert. 7'x10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Sperry Filter Press 42" open del., 40-plates, 41-frames.
80—New Pressure Cookers, 18"x18" & 24"x28".
1—New Glass Nash Centrifugal Pump, 160gpm.
1—New Nash Vacuum Pump Type AL-572.
1—Buflovak Jacketed Impregnating Tank 42"x52".
1—Stedman Disintegrator size 40-6.
1—Jeffrey Vibrating Conveyor 12" x 6" - 15' lg.
1—Nash Air Compressor, Type AL-623.
1—Manton Gaulin Stainless Homogenizer 125 gph.
1—I&R Vacuum Pump, 5 H.P., 60'.
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Raymond 8" Hammer Mill, like new
2—Louisville Steam Tube Dryers 6'x35'
1—New Louisville Continuous Filtering Machine.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor. 265 gals. cap. jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined. 17"x27".
1—Patterson Ball Mill, 42x36, jacketed.
2—Large Steam Jacketed Horizontal Mixers.
2—Ribbon Type Mixers, 50 & 90 cu. ft.—like new.
2—Steel Tanks 90,000 gals. ea. vert. welded const.
2—Ball & Jewell #2 Cutters with 75 H.P Motors.
1—J. H. Day 3-roll Mill 9x16.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—#10 Day 300 gal. Jacketed Sigma Blade Mixer.
4—New Heat Exc. 60' with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—4'x8' Shaker Screens.
6—W & P Mixers, jacketed, heavy duty, sigma blade, 300 gal. with hydraulic dumpers.
3—Baker-Perkins Mixers—same as above
2—Sperry 30" Filters, clsd. del., 39-pl. 40-fr.

H. LOEB & SON 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

SUMMER HIGHLIGHTS
THE FOLLOWING EQUIPMENT

1—Mikro atomizer #5, stainless.
2—Aluminum 12,500 gal. tanks, 10½ x 20'.
1—Baker Perkins 200 gal. #17 jacketed mixer, serrated blades.
1—Baker Perkins mixer, stainless, 20 gal., jacketed, sigma blade, 10 HP.
6—Boilers, 819, 430, 240, 75 HP.
10—Vacuum pumps, Kinney, Nash, Beach Russ, 703 to 8 CFM.
6—Patterson ball and pebble mills, lined and unlined, 50 to 250 gals.
1—Porter 600 gal. jacketed steel ball mill,
2—Fitzpatrick comminuters models D & K, stainless.
5—Ribbon blenders, 100 to 7500#.
18—Filter presses, Sperry, Shriver, 12", 18", 24", 30", 48", iron, lead, aluminum, rubber, wood, Everdur.
7—Stainless tanks, 800, 1200, 2000, 2300, 7000, 3700 gals.
21—Condensers, aluminum, 400 and 600 sq. ft.
1—Buflovak 24 x 48" double drum vacuum dryer, stainless steel lined.
3—Karbate condensers, 187 to 479 sq. ft.

CHEMICAL & PROCESS MACHINERY CORPORATION
52 Ninth Street, Brooklyn, N.Y.
HYacinth 9-7200

PARTIAL LISTINGS

1—72" Stainless Bubble Cap Column.
2—Porter, 40 gal. Pony Mixers, stainless steel.
3—Day #71 Roball Sifters, stainless steel.
4—Day #31 & 32 Roball Sifters.
2—Gemco 500# Conical Blenders, copper shell.
8—Stokes "RB2", "BB2" & "DD2" Rotary Tablet Machines.
2—Stokes "R" single punch Tablet Machines.
2—Fitzpatrick Model "D" Comminuting Machines, S.S.
1—Day 350 gal. Sigma Blade Mixer, stainless steel.
1—Fletcher 48" Centrifugal, stainless steel.
2—Devine #28 Vacuum Shelf Dryers.

"Ask for Bulletin A-39"

WE ARE INTERESTED IN YOUR SURPLUS MACHINERY.

The Machinery and Equipment Corp.
293 Prelinghuysen Ave., Newark 12, N. J.
TAlbot 4-3050

GUARANTEED REBUILT PROCESS MACHINERY AT GREAT SAVINGS...PROMPT DELIVERIES!

UNION Rebuilt Machinery Established 1912

Baker Perkins 50 gal. Stainless Steel Steam Jacketed Heavy Duty Mixers with Stainless Jacketed Blades.
Gemco 30 cu. ft. Vacuum Double Cone Blender.
J. H. Day from 12 up to 150 gal. Double Arm Mixers, Cincinnatus and Imperial.
3500 gallon working capacity Steam Jacketed Double Arm Mixing Tanks.
Baker Perkins 150 gal. Double Arm Jacketed Mixer with Vacuum Dome, Jacketed Blades.
MRM Semi Automatic S. S. Vacuum Filler.
Capem 1 Head and 4 Head Cappers.
Resina Model LC Capper.
Mikro 4TH, 3TH, 3W, 2TH, 1SH Pulverizers.
Day 50 to 10,000 lbs. Powder Mixers.
Baker Perkins, Day and Readco Double Arm Mixers, 1 qt. to 200 gal.
Day, Rotex, Robinson, Tyler Hum-mer, Selectro and Gayco Sifters.
Stokes DD2, BB and D3 Tablet Machines.
Transwrap Auger Filler.
Filler, Hope and Elgin Piston Fillers.
Triangle Elec-Tri-Pak Fillers, all models.
Stokes & Smith G1, G2 and HG84 Auger Powder Fillers.
Ceco and Jones Carton Sealers.
Standard Knapp 429 Carton Sealer.
Pony M. ML, TO, Ermold, World and Pneumatic Automatic Labelers.
Standard Knapp, Burt, CRCO Nu-Way Wraparound Labelers.
Package Machinery Co. FA, FA2, FA3, FA4, FAQ Automatic Wrappers.
Hayssen, Oliver, Hudson Sharp, Scandia, Miller Automatic Wrappers.

Over 5000 MACHINES IN STOCK—MIXERS, Labelers, Dryers, Fillers, Sifters, Grinders, Cappers, Pulverizers, Packaging Machines, Carton Sealing Machines.

TELL US ALL YOUR MACHINERY NEEDS

UNION STANDARD EQUIPMENT CO.
318-322 Lafayette Street New York 12, N. Y.

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$6.00, thirty-six words or less: $1.00 for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER, 30 *Church St., New York 7, N. Y.*

BUSINESS OPPORTUNITIES

5 to 50 acre Plant Sites, available in Metropolitan area for heavy industry. Write owner. C. J. Hauck, P.O. Box 26, Carlstadt, N. J.

EQUIPMENT OFFERED

For Sale: 42" x 120" atmospheric double drum Dryer; 93 sq. ft. S.S. Heat Exchanger ASME; Three S.S. sanitary Heat Exchangers to 150 sq. ft.; 1,100 gal. and 1,250 gal. S.S. Tanks; 50 gal. double Naben jacketed Baker-Perkins Mixer; 1,850 gal. and 3,000 gal. S.S. Truck Tanks on trailers. Best Equipment Company, 1737 Howard Street, Chicago 26, Illinois. AMbassador 2-1452.

EQUIPMENT WANTED

Launder-ometer Wanted in good condition, preferably made by Atlas Electrical Devices Co., Chicago, Type LHD-EF, Model B-5. Send offer with full description and/or picture. PO Box 218, Matawan, N. J.

FACILITIES OFFERED

Inflammable Liquids blending and packaging facilities available. Newark area. No job too small or too big. Petroleum Solvents Corporation, 331 Madison Avenue, New York 17, N. Y. MU 7-6836.

FOR RENT

Will Build to suit, rated paint, lacquer and chemical manufacturer, 12,000 to 100,000 sq. ft. buildings on sites of 1 acre to 25 acres. Heavy industrial area 15 minutes from Newark, Paterson. Jersey City and midtown Manhattan. Rail, power, water, sewer, etc. already in. Deal direct with owner, write C. J. Hauck, P.O. Box 26, Carlstadt, N. J.

MATERIALS OFFERED

Chemical Specialties: 250 lbs. Versene Regular—50c lb.; 800 lbs. P-Nitrophenol; 1,600 lbs. Natrusol; 6,200 lbs. Dodecyl Benzene Sulfonic Acid; 200 lbs. Zirconium Oxide 94%. Special low prices also. Industrial By-Products & Surplus Co., 40-40 Lawrence St., Flushing 54, N. Y. INdependence 1-4100.

MATERIALS OFFERED

Gallon Jugs, white or brown. Used, but washed clean. $18.00 Gross delivered in Metropolitan area. (Packed 4 to a case.) Phone Mr. Isaacson, LYnbrook 9-5600 or write OPD 419.

POSITIONS OFFERED

Wanted Salesman for New England states including New York, Pennsylvania and Ohio for sales of basic chemicals to manufacturers of detergents, cosmetics, textile chemicals, etc. Send curricul, vitae to OPD 420.

REPRESENTATION OFFERED

Old Established highly reputable chemical company with main office in New York City is open to represent one more account. Write OPD 415.

Current Market Quotations

--Continued from page 40

Xylenol cryst. 58°-60°C., m. , dms., t.c.l., works	lb.	.40	- —
Cryst. 56°-58°C., m.p., dms., t.c.l., works, frt. equald	lb.	.30	- —
45-47°C., m.p., dms. c.l., same basis	lb.	.212	- —
dms., t.c. same basis	lb.	.215	- —
tanks, same basis	lb.	.199	- —
Xylenol fraction b.r. 7°-9°C., dry above 227°C. dms., c.l., same basis	gal.	.96	- —
dms., t.c.l., same basis	gal.	.99	- —
tanks, same basis	gal.	.85	- —
b.r. 7°-9°C., dry at or below 227°C., dms., c.l., same basis	gal	1.11	- —
dms., t.c.l., same basis	gal.	1.14	- —
tanks, same basis	gal.	1.00	- —
Xylidines, mixed o-m-p, dms., c.l., or t.l. works	lb.	.39	- —
dms., t.c.l., same basis	lb.	.40	- —
tanks, same basis	lb.	.38	- —

Xylol

Xylol quotations, both coaltar and petroleum, may now be found under Xylene.

Y

Yara, yara, cns.	lb.	2.15	2.6.
Yeast, brewers, debittered, USP, Sacchomyces. dlvd.	lb.	.27	- —
Dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	- —
90 int'l B units per gram, 100-lb. dms	lb.	.52	- —
200 int'l B units per gram, 100-lb dms	lb.	..6	- —
300 int'l B units per gram, 100-lb. dms	lb.	.60	- —
Torula, USP, dlvd.	lb.	.18	- —

Yellow Pigments

Yellow pigment quotations, formerly grouped under one heading, are now listed individually, For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	40	42
Ylang-ylang oil, Bourbon, bots	lb.	19.00	-25.00
Bourbon, extra, bots	lb.	28.00	-40.00
Madagascar, bots	lb.	No Stocks.	
Yohimbine hydrochloride, bots, tins.	oz.	3.75	- 4.25

Z

Zein, bgs. 36,000-lb. lots or more,	lb.	.38	- —
bgs. 1,000 to 36,000-lb lots, works,	lb.	.40	- —
bgs., smaller lots, works	lb.	.43	- —
Zinc acetate, NF, VIII, dms.	lb.	.53	- —
Tech., dms., works	lb.	.29½-	.29¾
Zinc borate, bgs. c.l., dlvd E	lb.	.192	- —
bgs., t.c.l., dlvd E	lb.	.202	- —
Zinc chloride, NF, gran., dms	lb.	.42	- —
Precip., powd., dms.	lb.	.26	- —
Soln., 50%, dms., c.l., works.	100 lbs.	5.80	- —
dms., t.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
Tech., fused, dms., c.l., works.	100 lbs.	10.70	- —
dms., t.c.l., works	100 lbs.	11.20	- —
gran., fib. dms., c.l., works.	100 lbs.	11.45	- —
fib dms., t.c.l., works	100 lbs.	11.95	- —
Zinc chromate, bbls., dlvd.	lb.	.29	- —
Basic, bbls., dlvd.	lb.	.34	- —
Zinc cyanide dms. 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots works	lb.	.57	- —
Zinc dust., coml., bbls., c.l., works	lb.	.1360-	—
Pigment, bbls., c.l., works	lb.	.14	- —
bbls., l.c.l., works	lb.	.15	- —
Zinc fluoride, bbls., works	lb.	.49	- .50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.22	- —
dms. t.c.l. frt. alld	lb.	.24	- —
Zinc metal, prime western slabs, E. St. Louis	lb.	.10	- —
Prime western, slabs, New York.	lb.	.10½-	—
Zinc naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.24½-	—
10% Zn, dms., frt. alld.	lb.	.30	- —
Zinc nitrate tech., cryst., bbls., works	lb.	.20	- —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½-	—
bgs., t.c.l., same basis	lb.	.15½-	—
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15½-	—
bgs., t.c.l., same basis	lb.	.16½-	—
50%, bgs., c.l., same basis	lb.	.15½-	—
bgs., t.c.l., same basis	lb.	.16½-	—
leaded, 35%, bgs. c.l., mills, frt. alld.	lb.	.15½-	—
bgs., t.c.l., same basis	lb.	.16¾-	—
red seal, bgs., c.l., same basis.	lb.	.15¼-	—
bgs., t.c.l., same basis	lb.	.16¼-	—
white seal, bgs., c.l., same basis	lb.	.16¼-	—
bgs., t.c.l., same basis	lb.	.17¼-	—
USP, ctns. c.l., frt alld	lb.	.17¼-	—
ctns., t.c.l., same basis	lb.	.18¼-	—
Zinc oxide Pac Coast prices 1c. higher.			
Zinc, phenolsulfonate, NF, gran., dms	lb.	.43	- .44
NF, powd., dms.	lb.	.46	- .53
Zinc resinate, precip. 7.2-7.6% Zn, dms., frt. alld	lb.	.29	- —
Zinc silicofluoride, dms., works	lb.	.12½-	.14
Zinc stearate, tech. USP, ctns., c.l.,	lb.	.41	- —
ctns., t.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E	100 lbs.	8.75	- —
bgs., t.c.l., dlvd. E	100 lbs.	9.75	- —
USP, gran., dms.,	lb.	.26	- —
Zinc sulfate in bbls. 40c. higher			
Zinc sulfide pure, bgs., c.l. dlvd	lb.	.2530-	—
Zinc undecylenate, dms.	lb.	2.00	- —
Zinc yellow (see Zinc chromate)			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldehyde sulfoxylate basic, dms., c.l.	lb.	.25½-	—
dms., t.c.l.	lb.	.26	- —
Zircon (G), gran., bgs., c.l., works.	lb.	.03½-	—
bgs., 5 tons to c.l., works	lb.	.03⅝-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½-	—
Zircon (G), milled, bgs., c.l., works.	lb.	.04½-	—
bgs., 5 tons to c.l., works	lb.	.04⅝-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝-	—
bgs., 500-1,999-lb. lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c. higher			
Zirconium acetate, 13% soln., ZrO, c.l., 30,000 lbs. minimum, works	lb.	.23	- —
Zirconium hydride powd., dms., works	lb.	7.25	- 9.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50	- —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.45½-	—
bgs., smaller lots, works	lb.	.48	- —
Electric-fused, milled, bgs., c.l., works	lb.	.59	- —
bgs., 5-ton lots, works	lb.	.59½-	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.60	- —
bgs., 500 to 1,999-lb. lots., works	lb.	.60½-	—
bgs., smaller lots, works	lb.	.63	- —
Glass polishing grade, 94-97% ZrO., bgs., works	lb.	.55	- .65
Opacifier grade, 85-90% ZrO., bgs.,	lb.	.27	- .50
Stabilized oxide, 91% ZrO., milled, bgs	lb.	.62	- .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½-	—

BAG PACKER—St. Regis 100LS (new) single spout for 100# valve bags, complete w/motor.

EXHAUSTERS—2500 cfm clarage—4500 cfm Buffalo 8000/12000/18000 cfm American 35000 cfm sturtevant (unused)

MIXERS—2/3 c.f. cone—16 c.f. double cone (Pat Kelly)—5 c.f. Lancaster EBG3, EAG3 9 c.f. Lanc. EAG 4,—14 c.f. Clearfield 610.

ROTARY DRYERS—24 x 20, 36 x 25, 44 x 25.

MILLS, PEBBLE—18 x 24, 24 x 24, 30 x 24, 30 x 24 one piece jar, 40 x 48, 60 x 48 (new lining, new 7½ HP gearmotor), 72 x 60 porcelain, 6 x 9 Buhrstone.

MILLS, HARDINGE, CONICAL—4½ x 16, 7 x 22, 7 x 48 Buhrstone lined w/motor drives.

PULVERIZERS—Lab — bronze Raymond, M20 Quaker City (7½ HP) new, Mikro 2SI (10 HP), Williams AKB (25 HP), Jeffrey 36 x 42 (125 HP).

FORK LIFT TRUCKS—2000# Hyster 12' lift, 6000# Yale 8' lift, w/cab, pneumatics, gasoline

OVEN—2' x 3' x 32', gas fired, continuous, 4000 cfm, 325° F, like new.

SAND BLAST—cabinet, work glove type w/dust collector, motor, etc.

SCREENS—3 x 5 (1) & 3 x 10 (2) Tyler Hummer, 40 x 84 (2) Rotex, 40 x 84 (2) Roball, 40 x 120 (2) Rotex.

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

BEST BUY-GO WEST

★ Sharples S.S. PY-14 Super D Cantor 10 HP ★
★ Swenson-Walker Crystallizers, 20' long (7) ★
★ Jeffrey Vib. Tubular S.S. Conveyors, 15' (4) ★
★ Jeffrey Vib. Tubular S.S. Conveyors, 9' (4) ★
★ Jeffrey Feeder-Spreaders 12" x 30", FO-3 (8) ★
★ Williams Roller Mill, 3 roller Hi-side ★
★ Micro 2-TH Pulverizer, 15 HP motor ★
★ Baker-Perkins Sigma Mixer, 20 cu ft 30 HP ★
★ Lapp S.S. Pulsafeeder, dbl unit ½" IPS ★
★ Komarek-Greaves 15 TPH Briquetting Press ★
★ A T & M 42" Centrifuge, S.S. perf basket ★
★ Charlotte Model 20 Colloid Mill, 20 HP ★
★ Tyler 4' x 5' Single Deck Hummers, S.S. (3) ★
★ Raymond #1 Auto. Pulverizer, dbl Whizzer ★
★ Syntron Spiral Vib. Elevators, S.S. (14) ★
★ Niagara Filters, Model 510-28 S.S. leaves ★
★ Buflovak 2 Drum Dryer, 42" x 90" complete ★
★ Link-Belt Dryer, Roto-Louvre, size 207-10 ★
★ Link-Belt Dryer, Roto-Louvre, size 310-16 ★
★ Oliver 1' x 1' Rotary S.S. cont. Filter ★
★ Oliver 3' x 2' Rotary Vacuum Filters (2) ★
★ Oliver 6' x 6' Rot. Cont. Vac. Filters (3) ★
★ Louisville 42" x 15' Long Rotary Kiln ★
★ Lightnin-Side-Entering Agitators, 25 HP (8) ★
★ Abbe Dispersal Mixer, Stain. cont. 12" x 14" ★
★ Lee 250 gal S.S. Kettles, 90# W.P. (3) ★
★ Green 60 gal Model RA Agitated Kettles (2) ★
★ Sweco 48" Screens, Steel contact, comp. (4) ★

GOOD USED EQUIPMENT
MACHINERY AND EQUIPMENT COMPANY
GO WEST
514 Bryant Street • San Francisco 7, Calif.

IN STOCK

CAPPERS — CENTRIFUGALS — CONDENSERS — DRYERS — EVAPORATORS — FILLERS — FILTERS — FILTER PRESSES — GRINDERS — KETTLES — LABELERS — MILLS — MIXERS — PUMPS — SCREENS — CASE GLUERS — TABLET PRESSES — TANKS — ETC.

WRITE US OR CALL
SEELEY 8-1431
Send us your list of idle machines.
LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St. Chicago 22, Ill.

For Sale, Surplus
COPPER SULPHATE
53,000 lbs. crystal, all or part, at substantial discount.
THE SHWAYDER COMPANY
684 E. Woodbridge, Detroit 26, Michigan
WOodward 1-4946, Dept. 21

SURPLUS CHEMICALS BOUGHT
CHEMICALS • COLORS
PLASTICS • RESINS
INSECTICIDES • PHARMACEUTICALS
CASH OFFERS
Efficient Service • Confidential
Write, Wire, Phone
Rambach Chemical Company
93-03 Sutphin Blvd., Jamaica 35, N. Y., AXtel 7-8900
Cable Address • RAMBACHEM

- WANTED FOR CASH -
Off Spec. Job-Lot Discontinued / SURPLUS Used or Spoiled — Glycols (Any Type) • Plasticizers • Vegetable—Animal Oils Solvents • Chemicals • Raw Materials & Finished Goods
Drum Lots to Tanker Lots . . . Any Quantity
Don't Throw Away Materials Which Are Seemingly Useless . . . See Us First!
HIGHEST SPOT CASH PRICES PAID
CHEMSOL, INC., • 70 Dod Street, Elizabeth, New Jersey • EL 4-7654

we will buy your...
SURPLUS CHEMICALS
SOLVENTS WAXES OILS
RESINS DRUGS ETC.
WIRE OR PHONE FOR IMMEDIATE ACTION
All offers held in strictest confidence
Barclay CHEMICAL COMPANY, Inc.
77 VARICK STREET NEW YORK 13, N. Y. • WO 4-5120

FOR SURPLUS OUTLETS
ONE NAME STANDS OUT...
WANTED
Raw Materials
Finished Products
Equipment—Plants
Components
Wastes—Residues
Entire Inventories Bought
SEND LISTS NOW!
Reference—Dun & Bradstreet
Chemical Service Corp.
88 BEAVER ST. N. Y. 5.
HAnover 2-6970
EST 1925 Cable address "RETORTS" N. Y.

SURPLUS
Wanted
• Excess Inventory
• Waste Solvents
• Crudes Distilled
INDUSTRIAL BY-PRODUCTS & SURPLUS CO.
Division of Acsto Chemical Co., Inc. • 40-40 Lawrence St.
INdependence 1-4100 Flushing 54, N. Y.

Consulting Chemists and Engineers

ASSOCIATION OF CONSULTING CHEMISTS AND CHEMICAL ENGINEERS, INC.

50 East 41st Street, Room 82 — New York 17, N. Y. — LExington 2-1130

A Clearing House Reg. U. S. — *For Consultants* Pat. Office

WHEN YOU NEED A CONSULTANT ADDRESS THE ASSOCIATION
NO CHARGE FOR THIS SERVICE

Members Located From Coast To Coast Render Services In Any Given Field

Cable: CHEMANENGS, New York

R. S. ARIES & ASSOCIATES

Consultants to the Chemical Industries
New, Profitable Products
Process Analysis—Market Research
Technical & Economic Surveys
Sale and Licensing of Efficient Processes
Complete Chemical and Drug Plants
41 East 42d St. New York 17, N. Y.
OXford 7-7240

BJORKSTEN RESEARCH LABORATORIES

Sponsored Industrial Research

MADISON, WIS. ..... 323 W. Gorham St.
CHICAGO, ILL. ..... 1525 E. 53 St.
CLEVELAND, OHIO ..... 10524 Wilbur Ave.
HOUSTON, TEXAS .....2611 Sunset Boulevard
WASHINGTON, D. C..... 412 Fifth St., N.W.

CALKIN & BAYLEY, INC.

INDUSTRIAL CONSULTANTS
50 East 41st Street
New York 17, New York
LExington 2-1954

CHEMICAL ANALYSES

Complete — $75 per sample
Essential oils, drugs, fats, aa chemicals, paints, oils, pesticides, petro-hemicals, protective coatings, textile chemicals, waxes, specialties, water, cosmetics, etc.
Send credit references with samples
CHEMASTER LABORATORIES

Box 16, Steinway Station, Long Island City 3, N.Y.
YEllowstone 2-0203

DI CYAN & BROWN

Consulting Chemists
12 East 41st Street, New York 17, N. Y.
MUrray Hill 5-0011
DRUG AND COSMETIC PROBLEMS AND RESEARCH NEW PRODUCTS

Fitelson Laboratories, Inc.

Consulting and Analytical Chemists
J. Fitelson, Ph.D., Director
Foods, Spices, Oils, Drugs, Cosmetics
Specialist on labeling, sanitation and chemical problems connected with F.D.A. procedures.
254 W. 31st Street, New York 1, N. Y.
OX 5-0765

The BIGGEST MARKET for CONSULTATION SERVICES is among the readers of OIL, PAINT AND DRUG REPORTER
Tell them about yours

FOOD RESEARCH LABORATORIES, INC

FOUNDED 1922
Bernard L. Oser, Ph.D., Dir
RESEARCH—ANALYSES—CONSULTATION
Biological, Nutritional, Toxicological Studies for the Food, Drug and Allied Industries
48-14 33rd St., Long Island City 1, N. Y.
STillwell 4-4814

HUDSON LABORATORIES, Inc.

Consulting Chemists and Bacteriologists
Roger F. Lapham, M.D., Director
Testing Analysis Formulation Research
BACTERIOLOGY, CHEMISTRY, TOXICOLOGY
Antibiotics and Vitamins
Foods Drugs Cosmetics
Disinfectants Antiseptics Sanitizers
117 W. 13th Street, New York 11, N. Y.
ALgonquin 5-6290

LEBERCO LABORATORIES

Hormone Assays
Biological Assays
Pharmaceutical and Cosmetic Research
Sterility Tests • Toxicity Studies
Send for information concerning our services
125 Hawthorne St., Roselle Park, N. J.

LAWALL & HARRISSON

CHEMICAL • BACTERIOLOGICAL
PHARMACOLOGICAL
Analyses • Consultation
Research
FOOD AND PHARMACEUTICAL PROCESS ENGINEERING
Div. O 1921 Walnut Street
Philadelphia 3, Pa.

MOLNAR LABORATORIES

Consulting Testing and Research
• Organic Synthesis
• Clinical Studies
• Product Development & Control
• Toxicity and Dermatitis Tests
• Disinfectant Testing
211 E. 19th St., New York 3, GR. 5-1030
Cable Address: Molchem

W. S. PURDY COMPANY

ESI 1865
Analytical & Consulting Chemists
TESTING OF PETROLEUM OILS WAXES AND RELATED PRODUCTS
Bayway Terminal Bldg.
c/o Charles Martin & Co.
Elizabeth, N. J.
Phone ELizabeth 3-3894

RESIN RESEARCH LABORATORIES, INC.

406 Adams Street, Newark 5, N. J.
Market 2-5251
RESEARCH, DEVELOPMENT TESTING, EVALUATION
Resin and Polymer Synthesis
Coatings—Paints, Varnishes, Lacquer Waxes, Mastics
Moulding, Laminating, Casting, Extrusions, Calendering, Adhesives
Corrosion Insulation
Testings, Evaluation, Application Market Research

SEIL, PUTT & RUSBY, INC.

Established 1921
Stephen S. Varis Ph.D., President
Experts in analyses, of drugs, essential oils, spices, rotenone and pyrethrum and other organic insecticides, flavors alcoholic liquors toilet preparations, proprietaries and special formulae
16 E. 34th St., New York 16, N. Y.
Phone MUrray Hill 3-6368

LOUIS L. SHAPIRO

CHEMICAL CONSULTANT
28 Middagh St., Brooklyn 1, N. Y.
TRiangle 5-7715
SPECIALIST—Glycol Esters, Fats, Oils Stearic Acid, Fatty Acids Glycerine Waxes, Emulsifiers Protein, Fertilizers, Tallow Rendering, Packing House By Products, Soaps, Cosmetics, Adhesives, Distillation, Dowtherm Processes, Testing, Research, Economic Surveys.

SKEIST LABS

POLYMER SPECIALISTS
Sponsored research
Advisory consulting
Commercial development
• PLASTICS • ADHESIVES
• RESINS • COATINGS
89 Lincoln Park, Newark 2, N. J.
MArket 3-5002

RESEARCH & DEVELOPMENT LABORATORIES

Toxicology, Engineering,
Analyses, Market Research
Over 100 specialists
SNELL FOSTER D. SNELL, INC.
29 W. 15th St., N.Y.11, N.Y.

J. L. K. SNYDER, Ph.D.

Specializing in Management Problems, Product Development, Distribution, and Sales Promotion in the Chemical, Pharmaceutical and Nutrition Fields
Suite 501, 420 Lexington Ave.
New York 17, N. Y.
Telephone: MU 9-5870

RESEARCH • ANALYSIS • ENGINEERING
F. S. STEWART ASSOCIATES

FRANCIS S. STEWART, M.A.
DIRECTOR
INDUSTRIAL CHEMICAL ENGINEERS
PLASTIC CONSULTANTS
10819 VENICE BLVD., PHS: TExas 0-3184
LOS ANGELES 34, CALIFORNIA

STILLWELL & GLADDING, INC.

130 Cedar Street, New York 6, N. Y.
Analysis Inspection Sampling
Chemicals, drugs, fats oils, fertilizer, insecticides glycerine, soaps, solvents waxes, rotenone etc.
For Over 80 Years

THE BIGGEST MARKET for CONSULTATION SERVICES is among the readers of OIL, PAINT AND DRUG REPORTER
Tell them about yours

UNITED STATES TESTING COMPANY, INC.

1415 Park Avenue, Hoboken, N. J.
Testing — *Research*
Chemistry, Engineering, Electronics, Psychometrics, Textiles, Foods, Leather, Minerals, Microscopy, Product Certification, Engineering, Inspection, Product Development
BRANCH LABORATORIES
Boston, Los Angeles, Philadelphia, Brownsville, Memphis, Providence, Dallas, New York, San Angelo, Denver

EMERSON VENABLE*

AND ASSOCIATES
Consulting Chemists & Engineers
Pa. Registry No. 12606
PHYSICS
CHEMISTRY
ENGINEERING
TOXICOLOGY
PUBLIC HEALTH
METALS and ORES
CONTRACT RESEARCH
PROCESS and PRODUCT DEVELOPMENT
Member—A.C.C. & C.E.
HIland 1-8045
111 Fifth Avenue Pittsburgh 22, Pa.

WELLS LABORATORIES, INC.

25-27 Lewis Ave.
Jersey City 6, New Jersey
Phones: (N. Y.) Digby 9-0127
(Jersey) Oldfield 3-1907
CONSULTANTS - RESEARCH - TESTING
MICROBIOLOGY, CHEMISTRY, TOXICOLOGY
Biological Deterioration and Preservation
PAINTS, FOODS, DRUGS, COSMETICS, TEXTILES, PLASTICS, OILS, DISINFECTANTS

ROGER WILLIAMS

Technical & Economic Services, Inc.
• Chemical Economics
• Chemical Market Research
• Product Evaluation
Main Office: PO Box 426, Princeton, N.J.
Princeton 1-0209
New York Office: 148 East 38th St., NYC 16
MUrray Hill 5-5257
906 Edificio de Arquitectos, Humboldt y P, Vedado, La Habana, Cuba, Telephone U-5438

Projects, Consultation, and Production Control Services in Biochemistry, Chemistry, Bacteriology, Toxicology—Insecticide Testing and Screening
Write for price schedule.
WISCONSIN ALUMNI RESEARCH FOUNDATION

P.O. Box 2217-Y, Madison 1, Wisconsin

Advertisers Index

Acme Refining Corporation 45
Air Reduction Chemical Co. 60
Allied Chemical & Dye Corporation, Nitrogen Division 42
American Agricultural Chemical Co., The .. 1
American Cyanamid Company 72
Amoco Chemicals Corporation 57
Arapahoe Chemicals, Inc. 52
Argueso, M., & Co., Inc. 65
Armour & Company 15
Ashcraft-Wilkinson Co. 43

Baker, J. T., Chemical Co. 1, 48
Barclay Chemical Company, Inc. 70
Barnett Laboratories, Inc. 56
Becco Chemical Division, Food Machinery & Chemical Corp. 26
Benzol Products Company 47
Berkshire Chemicals, Inc. 40
Better Finishes & Coatings, Inc. 38
Bios Laboratories, Inc. 56
Blockson Chemical Company 40
Bower, Henry, Chemical Mfg. Co. 40
Bowman, Charles, & Co. 55
Brill Equipment Company 67
Brode Corporation, The 65

Celanese Corporation of America, Chemical Division 72
Chemical Manufacturing Co., Incorporated. 42
Chemical & Process Machinery Corp. 69
Chemical Service Corp. 70
Chemical Solvents, C. P., Incorporated 72
Chemirad Corporation 45
Chemsol, Inc. 70
Ciba Company, Inc. 47
Columbia Can Company 62
Columbia Southern Chemical Corporation 14, 38
Commercial Solvents Corporation 6
Concord Chemical Company 65
Connelly, Inc. 47
Consulting Chemists and Engineers 71
Continental Oil Company 30
Coupe, Robert A. 42
Cowles Chemical Company 32
Croda, Incorporated 65

Davison Chemical Company 31
Delhi-Taylor Oil Corp. 35
Dicalite Division, Great Lakes Carbon Corporation 62
Dickerson Company, The 43
Distillation Products Industries, Div. of Eastman Kodak Company 53
Dow Chemical Company, The 19, 47
Dragoco, Inc. 59
Dunkel, Paul A., & Company, Inc. 55
Du Pont de Nemours, E. I., & Co., (Inc.) .. 40
Duval Sulphur & Potash Co. 43

Eastman Chemical Products, Inc. 61
Emery Industries, Inc. 64
Enjay Company, Inc. 28
Equipment Clearing House, Inc. 69

Felton Chemical Company, Inc. 58
Fezandie & Sperrle 66
First Machinery Corp. 68
Florasynth Laboratories, Inc. 58
Fritzsche Brothers, Inc. 58

Gane's Chemical Works, Inc. 52
Gelb, R., & Sons, Inc. 69
General Biochemicals, Inc. 56
General Equipment & Trading Co. 65
Greeff, R. W., & Co. 1, 49
Gregory, Walter C., Corporation 55
Gross, A., & Company 65

Hall, C. P., Co., The 56
Harchem Division, Wallace & Tiernan, Inc. . 44
Heat & Power Co., Inc. 68
Hercules Powder Company, Incorporated .. 29
Heyden Newport Chemical Corporation 49
Hoffmann-La Roche, Inc. 21, 37
Hooker Electrochemical Company 41
Horn, Jefferys & Co. 63
Hutchinson, D. W., & Co., Inc. 58

Industrial By-Products & Surplus Co. 70
Inland Steel Container Company 47

Koppers Company, Inc. 46
Koster Keunen Mfg. Co., Inc. 65

Lawler Company 70
Lemke, B. L., Co., Inc. 55
Lever Brothers Company 44
Lindsay Chemical Company 52
Loeb, H., & Son 69
Loeb Equipment Supply Co. 70

Maas, A. R., Chemical Co., Division of Victor Chemical Works 40
Machinery & Equipment Co., Inc. 70
Machinery & Equipment Corp. 69
Magnus, Mabee & Reynard, Inc. 50
Mathieson Chemicals, Olin Mathieson Chemical Corporation 33
Meer Corporation 51
Merck & Co., Inc. 8, 41
Metalsalts Corporation 52
Metasap Chemical Company 63
Michel, M., & Company, Inc. 72
Michigan Chemical Corporation 25
Mutual Chemical Division, Allied Chemical & Dye Corporation 66
Mutual Citrus Products Company 22

National Aniline Division, Allied Chemical & Dye Corporation 13
National Casein 62
Neville Chemical Co. 60
Nysco Laboratories 50

Olin Mathieson Chemical Corporation Industrial Chemicals Division 33
Oronite Chemical Company 61

Peerless Oil & Chemical Corp. 72
Penick, S. B., & Company 50
Pennsalt Chemicals Corporation, Industrial Division 1
Pennsylvania Industrial Chemical Corp. 63
Pennsylvania Refining Company 56
Perry Equipment Corp. 68
Pfaltz & Bauer, Inc. 55
Pfizer, Chas., & Co., Inc. 20
Philipp Brothers Chemicals, Inc. 41
Potash Company of America 43
Prior Chemical Corporation 1
Process Plants Service, Inc. 69
Procter & Gamble Co. 4
Publicker Industries, Inc. 10

Quaker Oats Co., The 2
Quaker State Oil Refining Corp. 6

Rambach Chemical Company 7
Raney Catalyst Co. 4
Read, Chas. L., & Co., Inc. 3
Richmond Mica Corp. 6
Richter, Gedeon Pharmaceutical Products, Inc. 5
Robeco Chemicals, Inc. 7
Rohm & Haas Company 1

St. Joseph Lead Co. 6
Schwayder Co., The 7
Sergeant, E. M., Pulp & Chemical Co., Inc. . 4
Shell Chemical Corporation 4
Sinclair Chemicals, Inc. 3
Smith Chemical & Color Co. 6
Stauffer Chemical Company 1
Stein Equipment Co. 68
Strohmeyer & Arpe Co. 64
Sunkist Growers, Inc. 27
Swift & Company 64

Tamms Industries, Inc. 62
Tennessee Corporation 39
Texas Gulf Sulphur Co., Inc. 39
Thurston & Braidich 51
Todd, A. M., Company 58

Ungerer & Co. 59
Union Carbide & Carbon Corporation, Carbide and Carbon Chemicals Company Division 2, 44
Union Standard Equipment Co. 69
U. S. Borax & Chemical Corporation Pacific Coast Borax Company Division 1
U. S. Industrial Chemicals Company, Division of National Distillers & Chemical Corporation 28a, 28b
U. S. Steel Products Division, U. S. Steel Corporation 16

van Ameringen-Haebler, Inc. 59

Western Condensing Co. 23
Will & Baumer Candle Co., Inc. 65
Wyandotte Chemicals Corporation 42

Zinsser & Company, Inc., Subsidiary of The Harshaw Chemical Co. 66

Ammonium Nitrate

—Continued from page 5

attain almost any desired result," he notes. "They have found that they can control ammonium nitrate fertilizer just as easily as they can control conventional blasting agents."

Using ammonium nitrate fertilizer as a blasting agent in place, of conventional materials can be done at a saving of one-half or more for a given job, Mr. Smith adds. Ammonium nitrate fertilizer costs 4½ cents a pound, conventional blasting agents cost from 8 cents per pound upward.

Reisman Named Representative

H. Reisman Corporation, New York, has been named sales representative for Tuscarora Chemical Works, Chittenango, N. Y. Reisman will seel Tuscarora's line of pharmaceutical and feed-grade iodides in the north and mid-eastern states.

ESTER SOLVENTS
Ethyl — Isopropyl — Butyl
Methyl Amyl and
"Cellosolve"* Acetates
* Registered Trade Mark U.C.C.

THE CP
CHEMICAL SOLVENTS
INCORPORATED
60 PARK PLACE · NEWARK 2 N J
WOrth 2-7763 MArket 2-3650

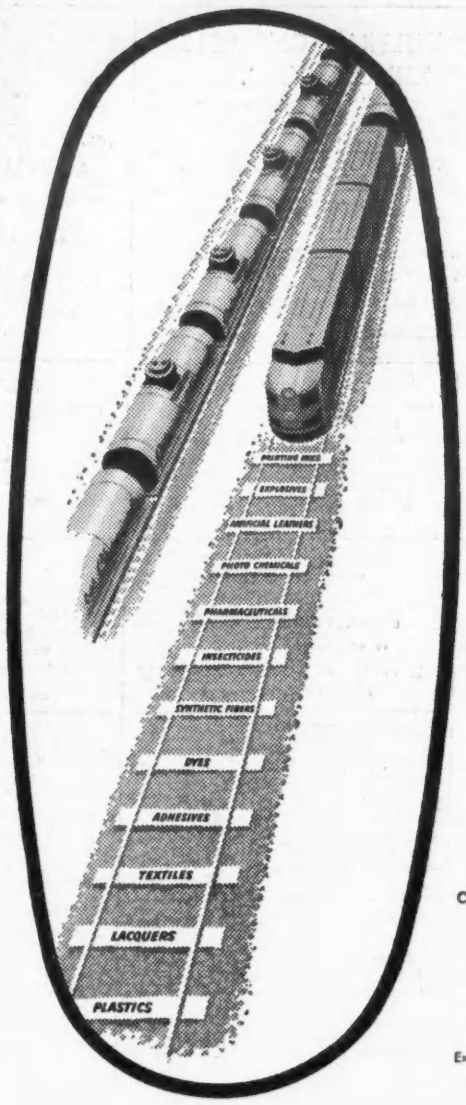
TOUR CONTACT WITH THE WORLD'S MARKETS
ROBECO
ESTABLISHED 1918

SPERMACETI WAX USP
MEETS T.G.A. STANDARDS
SOLE U.S. SELLING AGENTS
for
HUGH HIGHGATE & CO., LTD.
PAISLEY, SCOTLAND

ROBECO CHEMICALS, INC.
25 EAST 26th ST., NEW YORK 10, N. Y.
CABLE ADDRESS "RODRUG" N.Y. ALL CODES
MUrray Hill 3-7500

GLYCOL ETHERS
BUTYL CARBITOL® BUTYL CELLOSOLVE® CELLOSOLVE SOLVENT
MONO-DI-TRI ALKANOLAMINES
ESTERS
BUTYL ACETATE ISOPROPYL ACETATE CELLOSOLVE ACETATE
ALCOHOLS
® Union Carbide Chemicals Co.

PEERLESS OIL & CHEMICAL CORP.
3830 REVIEW AVENUE
Long Island City 1, N.Y.
EXeter 2-7700
New York City's Chemical Center
A CAREY BROS. INDUSTRY



Celanese acetyl chemicals work for all industries

. . . tankcar, tankwagon or drum shipments from strategically located warehouses assure dependable volume supply. Get on the right track for:

acetic acid
acetaldehyde
acetic anhydride
n-butyl alcohol and acetate
n-propyl acetate
sodium acetate
vinyl acetate monomer
vinyl propionate monomer
pentaerythritol

Celanese Corporation of America, Chemical Division, 180 Madison Ave., New York 16, N. Y.

Celanese®

Celanese CHEMICALS

Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.

Bulk tonnage uniformity of "CACHALOT" fatty alcohols simplifies chem-processing

High spec lauryl, cetyl, stearyl, oleyl available

New uses open for long-chain organics

Whether your requirements are for a few hundred pounds or tank car lots, you get the same quality in CACHALOT brand fatty alcohols you would expect in laboratory reagents . . . yet priced to fit your processing plans.

Best Value

Continuous uniformity in fatty alcohols grows out of years of specialization in the manufacture of higher aliphatics. Made by modern techniques of high pressure hydrogenation and vacuum distillation, CACHALOT lauryl, cetyl, stearyl, and oleyl alcohols are today's standard for straight-chain alcohols.

Large Variety

There's a wide variety of NF, USP, TGA, and technical grades from which you can choose, or specify one tailor-made to your requirements. Controlled iodine values, low acid and ester values ease quality control of your end-products.

Easy to Use

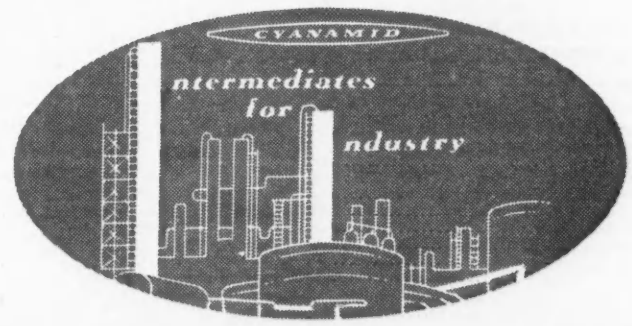
Purchasing men tell us they like the clean modern packing of CACHALOT fatty alcohols: white, crystalline cetyl and stearyl alcohols are protected by polyethylene-lined cartons or bags; clear liquid lauryl and oleyl alcohols are packed in uniform-weight steel drums; bulk quantities are shipped in steam-cleaned coiled tank cars.

Get all the facts on fatty alcohols from *MICHEL*

The booklet tells how to put the new potentials of lauryl, cetyl, stearyl, and oleyl alcohols to work in your product or process. Why not write for copies for yourself and your researchers?

CACHALOT: reg. trade name

MICHEL
M. Michel and Company, Inc.
90 Broad Street, New York 4



"BASIC IS AS BASIC DOES" *in Intermediates*

"Handsome is as handsome does" has its paraphrase in chemical marketing. It's fine to be basic in raw materials—but the true value of a basic position is what the manufacturer does to convert these raw materials into products useful to the chemical and related industries.

Cyanamid is *basic* in the chemicals that stand behind the diverse line of Cyanamid Intermediates. In controlling the basic materials *and* all subsequent reaction steps, Cyanamid assures its customers of ready supplies of quality intermediates.

Technical data sheets on the Cyanamid Intermediates listed at the right are available on request.

CYANAMID
AMERICAN CYANAMID COMPANY
Intermediates Department
Bound Brook, New Jersey

Aniline Oil
Aniline Salt
Anthraquinone
Beta Carboxy Anthraquinone
Beta Chlor Anthraquinone
Beta Methyl Anthraquinone
Beta Naphthalene Sodium Sulfonate
Beta Naphthol
Chlor Benzoyl Benzoic Acid
Diethylaniline
Dimethylaniline
Diphenylamine
G-Salt
Meta Nitraniline
Meta Nitro Para Toluidine
Meta Toluylene Diamine
Monoethylaniline
Nitrobenzene (Oil of Myrbane)
Ortho Benzoyl Benzoic Acid
Ortho Toluidine Sulfonic Acid
Para Nitraniline
Para Phenylene Diamine
Para Toluyl Benzoic Acid
R-Salt
Schaeffer's Salt
Sulfanilic Acid
Thiourea
Tobias Acid